



Kerr-McGee Oil & Gas Onshore LP  
1999 Broadway, Suite 3700  
Denver, CO 80205

September 19, 2007

Mrs. Diana Mason  
Division of Oil, Gas and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

Re: Directional Drilling R649-3-11  
NBU 922-18C4CS  
T9S R22E  
Section 18: NENW  
SWNW, Lot 2, 1881' FNL, 370' FWL (surface)  
NENW 1075' FNL, 1849' FWL (bottom hole)  
Uintah County, Utah

Dear Mrs. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18C4CS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore and the W/2, W/2NE/4 and SE/4 of Section 18 (federal leases USA UTU-0359, USA-UTU 0359-A and USA-UTU 0461).

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore LP requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

A handwritten signature in black ink, appearing to read 'James C. Colligan III'.

James C. Colligan III  
Landman

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

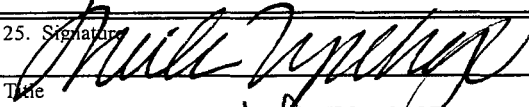

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>UTU-0359</b>
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>TRIBAL SURFACE</b>
2. Name of Operator <b>KERR MCGEE OIL AND GAS ONSHORE LP</b>		7. If Unit or CA Agreement, Name and No. <b>UNIT #891008900A</b>
3A. Address <b>1368 SOUTH 1200 EAST VERNAL, UT 84078</b>	3b. Phone No. (include area code) <b>(435) 781-7024</b>	8. Lease Name and Well No. <b>NBU 922-18C4CS</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>SW/NW 1881'FNL, 370'FWL (LOT 2)</b> At proposed prod. Zone <b>NE/NW 1075'FNL, 1849'FWL</b>		9. API Well No. <b>43047-39845</b>
14. Distance in miles and direction from nearest town or post office* <b>17 +/- MILES FROM OURAY, UTAH</b>		10. Field and Pool, or Exploratory <b>NATURAL BUTTES</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>370'</b>	16. No. of Acres in lease <b>162.39</b>	11. Sec., T., R., M., or Blk. and Survey or Area <b>SEC. 18, T9S, R22E</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>REFER TO TOPO C</b>	19. Proposed Depth <b>10,185'</b>	12. County or Parish <b>UINTAH</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>4894'GL</b>		13. State <b>UTAH</b>
22. Approximate date work will start* <b>UPON APPROVAL</b>		17. Spacing Unit dedicated to this well <b>40.00</b>
23. Estimated duration <b>TO BE DETERMINED</b>		20. BLM/BIA Bond No. on file <b>RLB0005239</b>

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).   |
| 2. A Drilling Plan.  | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office. | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature 	Name (Printed/Typed) <b>SHEILA UPCHEGO</b>	Date <b>11/16/2007</b>
Title <b>SENIOR LAND ADMIN SPECIALIST</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>BRADLEY G. HILL</b>	Date <b>11-20-07</b>
Title <b>ENVIRONMENTAL MANAGER</b>		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Surf

BHW

Federal Approval of this  
Action is Necessary

RECEIVED

NOV 20 2007

DIV. OF OIL, GAS & MINING

628948X  
4432868Y  
40.038086  
-109.488583

629394X  
4433122Y  
40.040302  
-109.483312

T9S, R22E, S.L.B.&M.

Kerr-McGee Oil & Gas Onshore LP

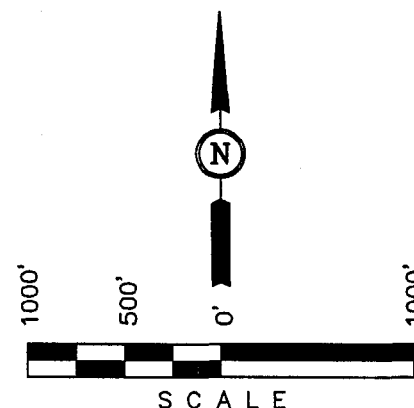
Well location, NBU #922-18C4CS, located as shown in Lot 2 of Section 18, T9S, R22E, S.L.B.&M., Uintah County, Utah.

### BASIS OF ELEVATION

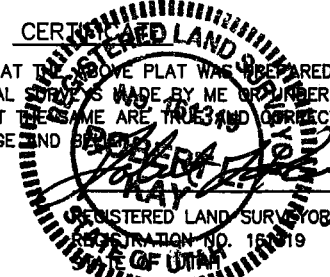
BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

### BASIS OF BEARINGS

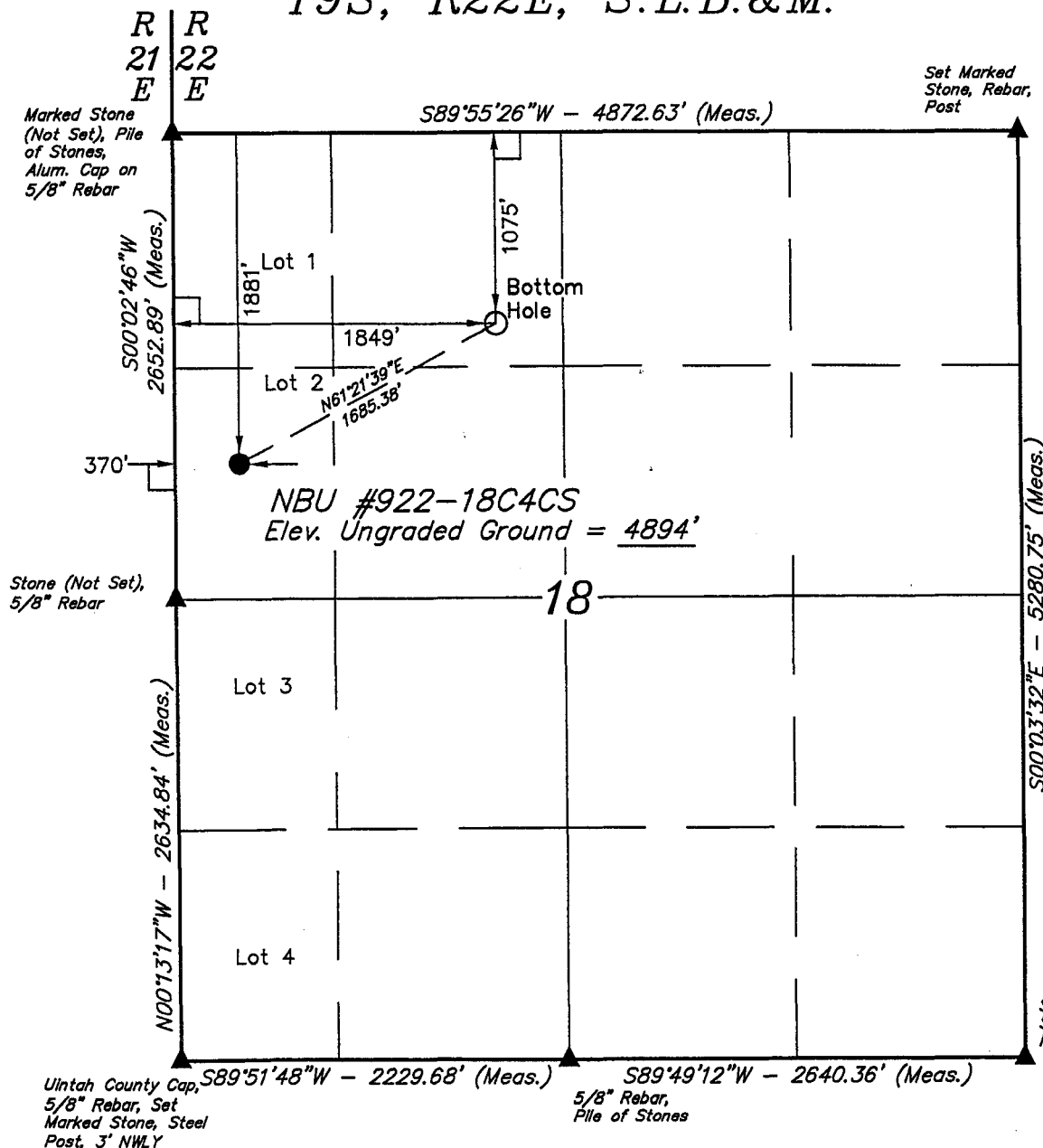
BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Set Marked Stone, Large Pile of Stones



### LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

(NAD 83)  
 LATITUDE = 40°02'17.10" (40.038083)  
 LONGITUDE = 109°29'21.86" (109.489406)  
 (NAD 27)  
 LATITUDE = 40°02'17.23" (40.038119)  
 LONGITUDE = 109°29'19.39" (109.488719)

UINTAH ENGINEERING & LAND SURVEYING  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 05-07-07	DATE DRAWN: 05-17-07
PARTY D.K. L.K. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	

**NBU 922-18C4CS  
SW/NW LOT 2, SEC. 18, T9S, R22E  
UINTAH COUNTY, UTAH  
UTU-0359**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

**1. Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1834'
Top of Birds Nest Water	2116'
Mahogany	2473'
Wasatch	5087'
Mesaverde	7789'
MVU2	8731'
MVL1	9250'
TVD	9870'
TD (MD)	10,185'

**2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River	1834'
	Top of Birds Nest Water	2116'
	Mahogany	2473'
Gas	Wasatch	5087'
Gas	Mesaverde	7789'
Gas	MVU2	8731'
Gas	MVL1	9250'
Water	N/A	
Other Minerals	N/A	

**3. Pressure Control Equipment (Schematic Attached)**

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

**4. Proposed Casing & Cementing Program:**

*Please see the Natural Buttes Unit SOP.*

**5. Drilling Fluids Program:**

*Please see the Natural Buttes Unit SOP.*

6. **Evaluation Program:**

*Please see the Natural Buttes Unit SOP.*

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 10,185' TD, approximately equals 6315 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 4074 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

9. **Variances:**

*Please see Natural Buttes Unit SOP.*

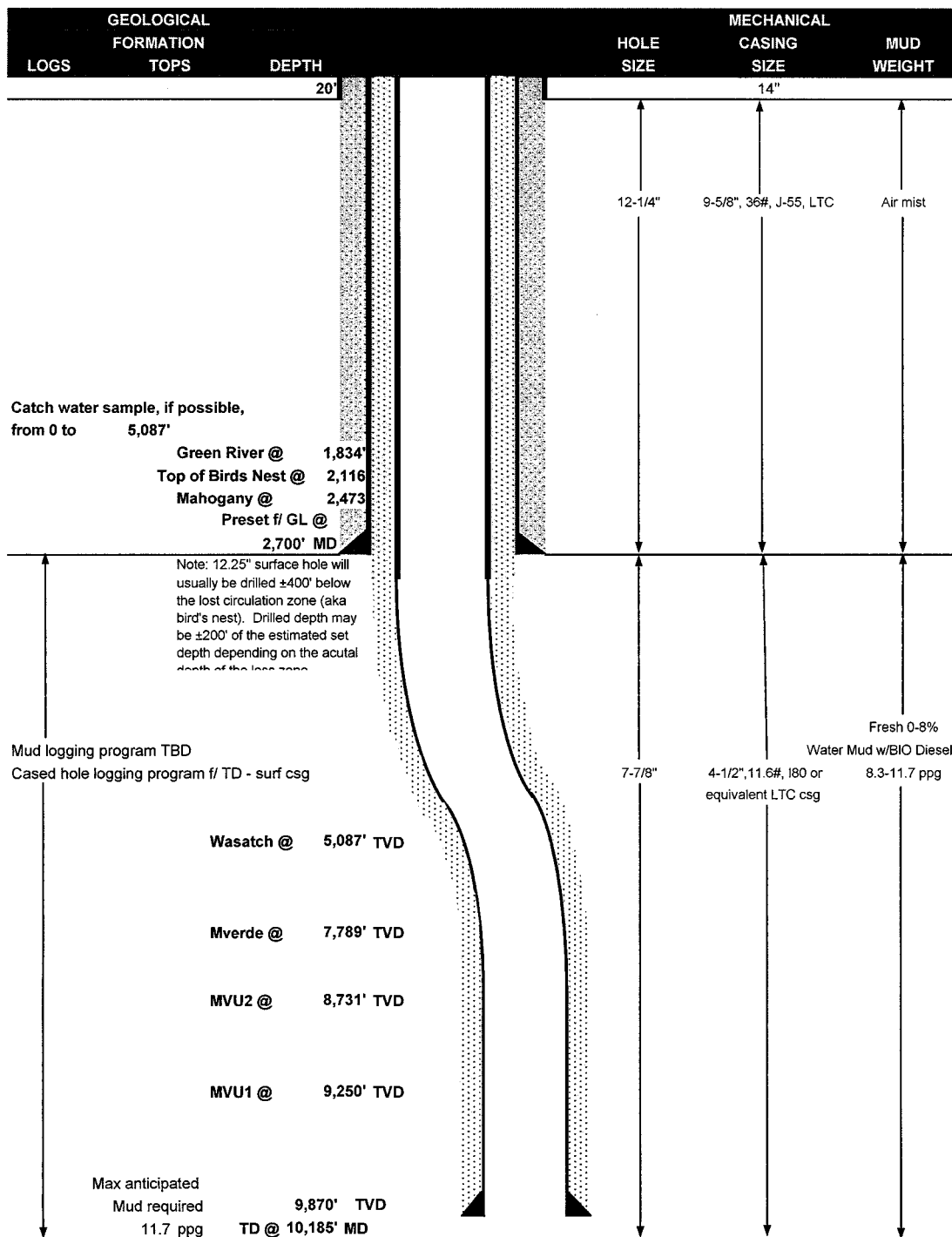
10. **Other Information:**

*Please see Natural Buttes Unit SOP.*

**KERR-McGEE OIL & GAS ONSHORE LP**

## DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP	DATE	November 16, 2007		
WELL NAME	<b>NBU 922-18C4CS</b>	TD	10,185'	MD	9,870' TVD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah
		ELEVATION	4,893'	GL	KB 4,908'
SURFACE LOCATION	SW/NW LOT 2, T9S, R22E 1881'FNL, 370'FWL				
	Latitude: 40.038083 Longitude: 109.489406				
BTM HOLE LOCATION	NE/NW SEC. 18, T9S, R22E 1075'FNL, 1849'FWL				
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: TRIBAL SURFACE, BLM MINERALS, UDOGM, Tri-County Health Dept.				





# **KERR-McGEE OIL & GAS ONSHORE LP** **DRILLING PROGRAM**

## **CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3520	2020	453000
SURFACE	9-5/8"	0 to 2700	36.00	J-55	LTC	0.89	1.60	5.93
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 10185	11.60	I-80	LTC	1.97	1.02	1.95

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)
- (Burst Assumptions: TD = 0.0 ppg) .22 psi/ft = gradient for partially evac wellbore
- (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)
- MASP 3956 psi

## **CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
Option 1	TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	50		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	1500	65/35 Poz + 6% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOW	360	35%	12.60	1.81
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	7,285'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	790	60%	11.00	3.38
	TAIL	2,900'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	810	60%	14.30	1.31

\*Substitute caliper hole volume plus 15% excess if accurate caliper is obtained

## **FLOAT EQUIPMENT & CENTRALIZERS**

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

## **ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.

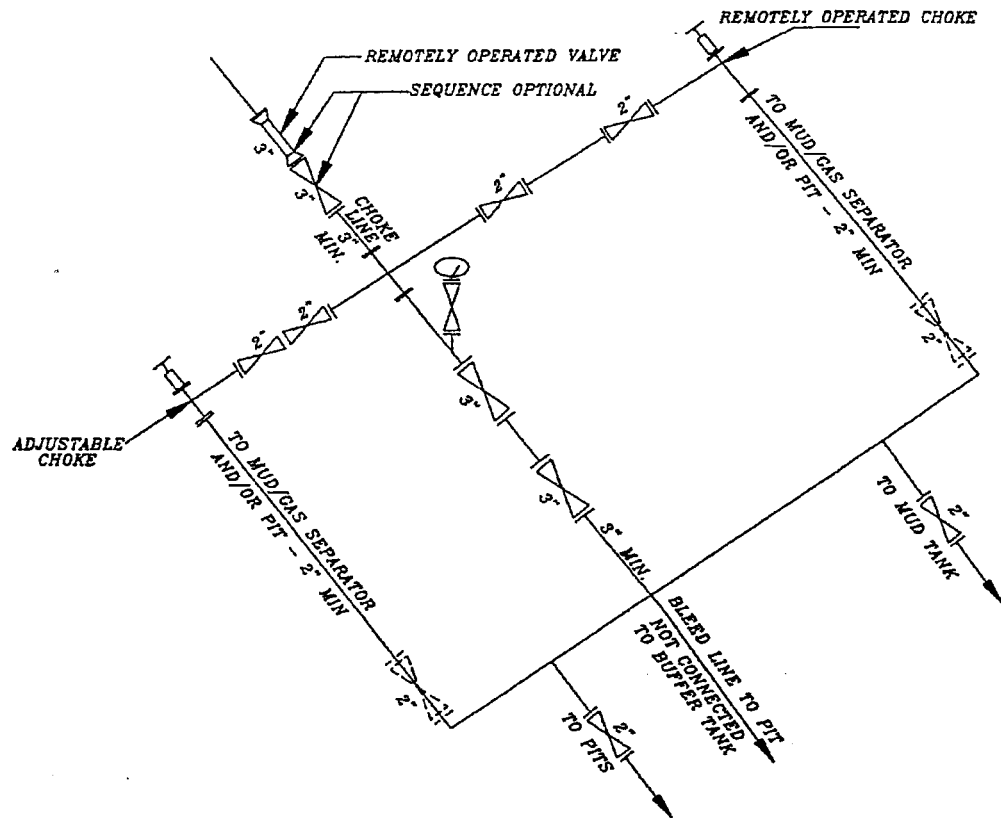
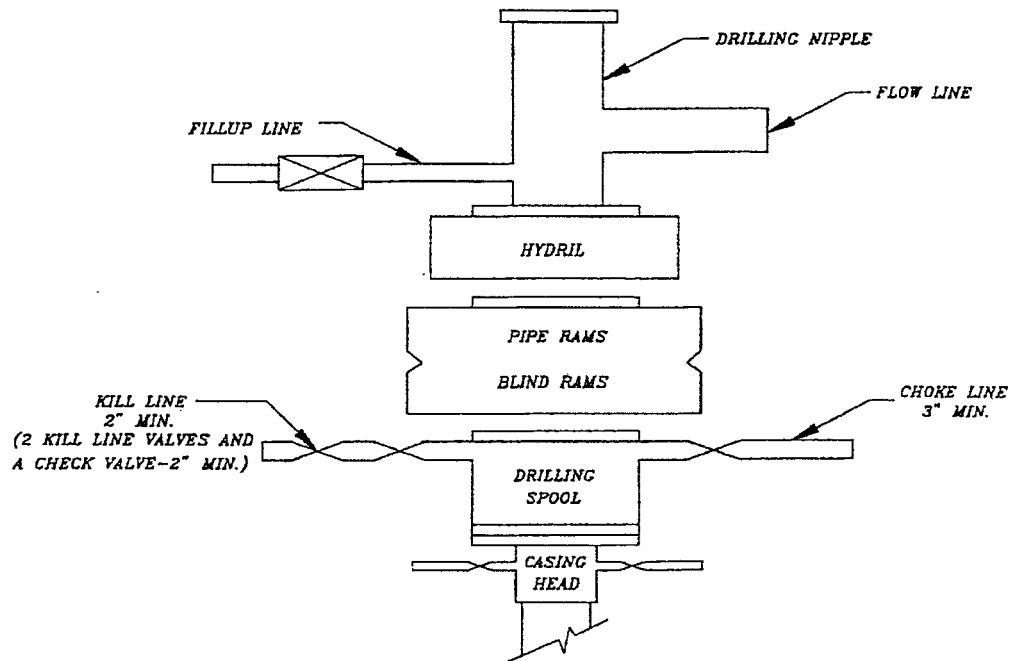
Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: \_\_\_\_\_ DATE: \_\_\_\_\_  
Brad Laney

DRILLING SUPERINTENDENT: \_\_\_\_\_ DATE: \_\_\_\_\_  
Randy Bayne

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM







**Weatherford<sup>®</sup>**

## **Drilling Services**

---

## **Proposal**

---



### **ANADARKO - KERR McGEE**

NBU 922-18C4CS

UINTAH COUNTY, UTAH

WELL FILE: PLAN 1

SEPTEMBER 24, 2007

---

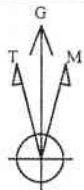
**Weatherford International, Ltd.**

15710 John F. Kennedy Blvd  
Houston, Texas 77032 USA

+1.281.260.1300 Main

+1.281.260.4730 Fax

[www.weatherford.com](http://www.weatherford.com)



Azimuths to Grid North  
True North: -0.97°  
Magnetic North: 10.60°

Magnetic Field  
Strength: 52768nT  
Dip Angle: 66.02°  
Date: 9/24/2007  
Model: bggm2006

#### SECTION DETAILS

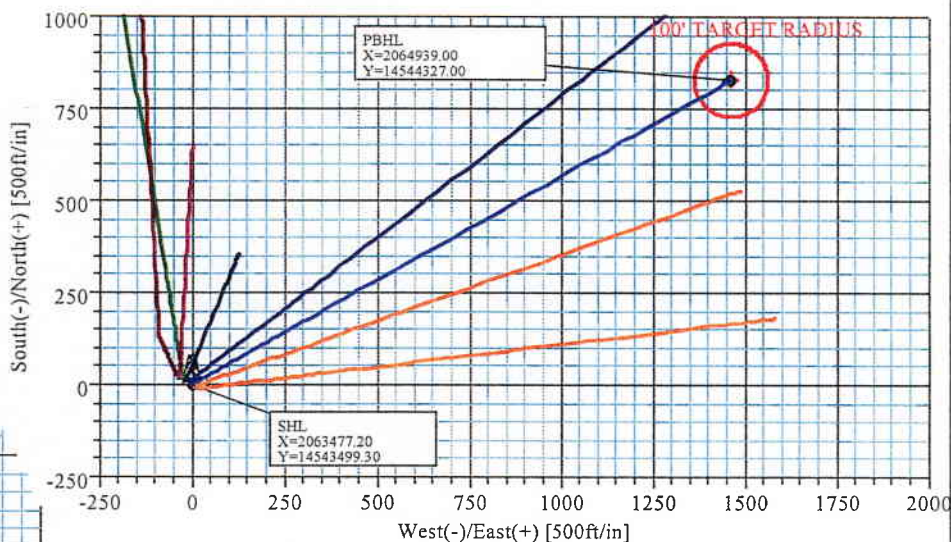
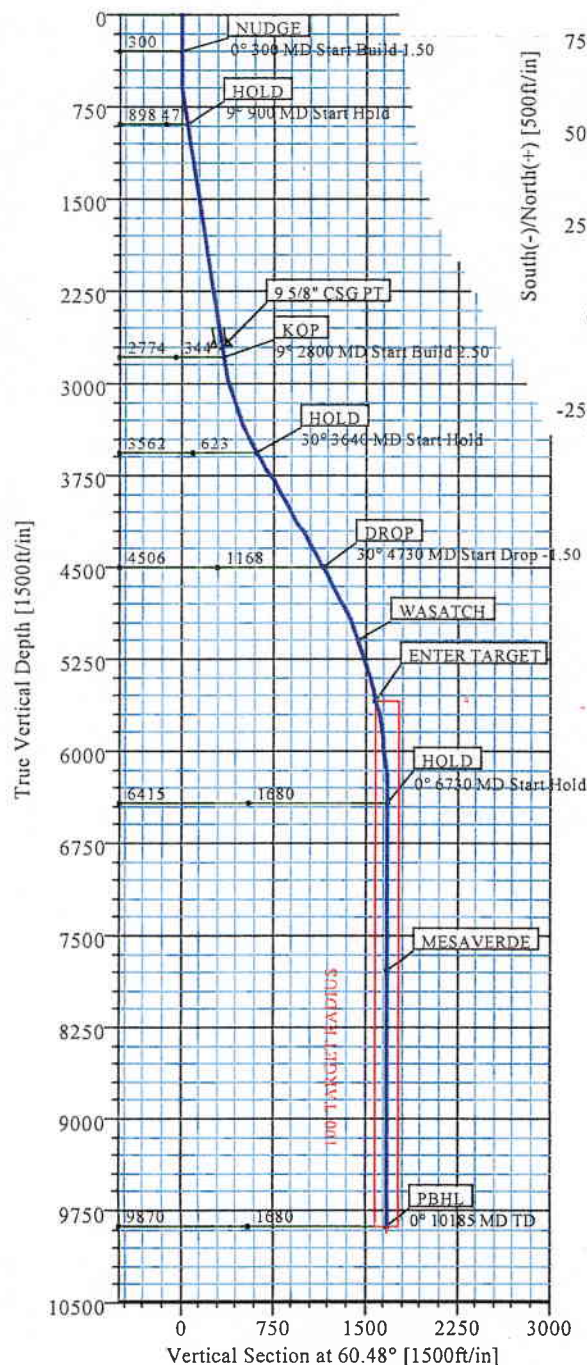
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0000	0.0000	60.4806	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
2	300.0000	0.0000	60.4806	300.0000	0.0000	0.0000	0.0000	60.4806	0.0000	
3	900.0000	9.0000	60.4806	897.5356	23.1711	40.9224	1.5000	60.4806	47.0271	
4	2800.0000	9.0000	60.4806	2774.1435	169.6195	299.5648	0.0000	0.0000	344.2526	
5	3640.0000	30.0000	60.4806	3561.5377	307.0046	542.2003	2.5000	0.0000	623.0835	
6	4730.0726	30.0000	60.4806	4505.5683	575.5538	1016.4849	0.0000	0.0000	1168.1198	
7	6730.0726	0.0000	60.4806	6415.4276	827.7000	1461.8000	1.5000	180.0000	1679.8650	
8	10184.6450	0.0000	60.4806	9870.0000	827.7000	1461.8000	0.0000	0.0000	1679.8650	PBHL

#### WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
922-18C4CS	0.00	0.00	14543499.30	2063477.20	40°02'17.074N	109°29'18.870W	N/A



KB = 4908'  
GR = 4893'



#### LEGEND

- 922-18C4BS
- 922-18D2S
- 922-18D3BS
- 922-18D3DS
- 922-18E2S
- 922-18F1BS
- 922-18F1CS
- 922-18C4CS
- Plan #1

#### FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	5087.0000	5373.2937	WASATCH
2	7789.0000	8103.6450	MESAVERDE

#### FIELD DETAILS

UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)  
Geodetic System: Universal Transverse Mercator (USfeet)  
Ellipsoid: NAD27 (Clarke 1866)  
Zone: UTM Zone 12, North 114W to 108W  
Magnetic Model: bggm2006  
System Datum: Mean Sea Level  
Local North: Grid North

#### CASING DETAILS

No.	TVD	MD	Name	Size
1	2700.0000	2724.9323	9 5/8" CSG PT	9.625

Plan: Plan #1 (922-18C4CS/1)

Created By: L WINCHELL

Date: 9/25/2007

# Weatherford Drilling Services

## Directional Plan Report


**Weatherford**

<b>Company:</b> Anadarko-Kerr-McGee <b>Field:</b> UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27) <b>Site:</b> NBU 922-18C4CS PAD CDEF <b>Well:</b> 922-18C4CS <b>Wellpath:</b> 1	<b>Date:</b> 9/25/2007 <b>Time:</b> 16:14:24 <b>Page:</b> 1 <b>Co-ordinate(NE) Reference:</b> Site: NBU 922-18C4CS PAD CDEF <b>Vertical (TVD) Reference:</b> SITE 4908.0 <b>Section (VS) Reference:</b> Well (0.00N,0.00E,60.48Azi) <b>Survey Calculation Method:</b> Minimum Curvature <b>Db:</b> Sybase
---	---

**Field:** UINTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)

**Map System:** Universal Transverse Mercator (USfeet)  
**Geo Datum:** NAD27 (Clarke 1866)  
**Sys Datum:** Mean Sea Level

**Map Zone:** UTM Zone 12, North 114W to 108W  
**Coordinate System:** Site Centre  
**Geomagnetic Model:** bggm2006

**Site:** NBU 922-18C4CS PAD CDEF

1881' FNL 370' FWL SEC 18-T9S-R22E

<b>Site Position:</b>	<b>Northing:</b> 14543499.30 ft	<b>Latitude:</b> 40 2 17.074 N	
<b>From:</b> Map	<b>Easting:</b> 2063477.20 ft	<b>Longitude:</b> 109 29 18.870 W	
<b>Position Uncertainty:</b>	0.00 ft	<b>North Reference:</b> Grid	
<b>Ground Level:</b>	4893.00 ft	<b>Grid Convergence:</b>	0.97 deg

**Well:** 922-18C4CS

**Slot Name:**

<b>Well Position:</b>	<b>+N/-S</b> 0.00 ft	<b>Northing:</b> 14543499.30 ft	<b>Latitude:</b> 40 2 17.074 N
	<b>+E/-W</b> 0.00 ft	<b>Easting:</b> 2063477.20 ft	<b>Longitude:</b> 109 29 18.870 W
<b>Position Uncertainty:</b>	0.00 ft		

**Wellpath:** 1

<b>Current Datum:</b> SITE	<b>Height</b> 4908.00 ft	<b>Drilled From:</b> Surface	
<b>Magnetic Data:</b> 9/24/2007		<b>Tie-on Depth:</b> 0.00 ft	
<b>Field Strength:</b> 52768 nT		<b>Above System Datum:</b> Mean Sea Level	
<b>Vertical Section:</b> Depth From (TVD)		<b>Declination:</b> 11.57 deg	
	<b>+N/-S</b>	<b>Mag Dip Angle:</b> 66.02 deg	
	ft	<b>+E/-W</b>	<b>Direction</b>
		ft	deg
0.00	0.00	0.00	60.48

**Plan:** Plan #1

**Date Composed:** 9/25/2007

**Principal:** Yes

**Version:** 1  
**Tied-to:** From Surface

**Plan Section Information**

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	60.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	60.48	300.00	0.00	0.00	0.00	0.00	0.00	60.48	
900.00	9.00	60.48	897.54	23.17	40.92	1.50	1.50	0.00	60.48	
2800.00	9.00	60.48	2774.14	169.62	299.56	0.00	0.00	0.00	0.00	
3640.00	30.00	60.48	3561.54	307.00	542.20	2.50	2.50	0.00	0.00	
4730.07	30.00	60.48	4505.57	575.55	1016.48	0.00	0.00	0.00	0.00	
6730.07	0.00	60.48	6415.43	827.70	1461.80	1.50	-1.50	0.00	180.00	
10184.65	0.00	60.48	9870.00	827.70	1461.80	0.00	0.00	0.00	0.00	PBHL

**Survey**

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
0.00	0.00	60.48	0.00	0.00	0.00	0.00	0.00	14543499.30	2063477.20	
100.00	0.00	60.48	100.00	0.00	0.00	0.00	0.00	14543499.30	2063477.20	
200.00	0.00	60.48	200.00	0.00	0.00	0.00	0.00	14543499.30	2063477.20	
300.00	0.00	60.48	300.00	0.00	0.00	0.00	0.00	14543499.30	2063477.20	NUDGE
400.00	1.50	60.48	399.99	0.64	1.14	1.31	1.50	14543499.94	2063478.34	
500.00	3.00	60.48	499.91	2.58	4.56	5.23	1.50	14543501.88	2063481.76	
600.00	4.50	60.48	599.69	5.80	10.25	11.77	1.50	14543505.10	2063487.45	
700.00	6.00	60.48	699.27	10.31	18.21	20.92	1.50	14543509.61	2063495.41	
800.00	7.50	60.48	798.57	16.10	28.44	32.68	1.50	14543515.40	2063505.64	
900.00	9.00	60.48	897.54	23.17	40.92	47.03	1.50	14543522.47	2063518.12	HOLD
1000.00	9.00	60.48	996.30	30.88	54.54	62.67	0.00	14543530.18	2063531.74	
1100.00	9.00	60.48	1095.07	38.59	68.15	78.31	0.00	14543537.89	2063545.35	
1200.00	9.00	60.48	1193.84	46.29	81.76	93.96	0.00	14543545.59	2063558.96	
1300.00	9.00	60.48	1292.61	54.00	95.37	109.60	0.00	14543553.30	2063572.57	

# Weatherford Drilling Services

## Directional Plan Report

<b>Company:</b> Anadarko-Kerr-McGee	<b>Date:</b> 9/25/2007	<b>Time:</b> 16:14:24	<b>Page:</b> 2
<b>Field:</b> UINAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	<b>Co-ordinate(NE) Reference:</b>	<b>Site:</b> NBU 922-18C4CS PAD CDEF	
<b>Site:</b> NBU 922-18C4CS PAD CDEF	<b>Vertical (TVD) Reference:</b>	<b>SITE</b> 4908.0	
<b>Well:</b> 922-18C4CS	<b>Section (VS) Reference:</b>	<b>Well</b> (0.00N,0.00E,60.48Azi)	
<b>Wellpath:</b> 1	<b>Survey Calculation Method:</b>	<b>Minimum Curvature</b>	<b>Db:</b> Sybase

### Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
1400.00	9.00	60.48	1391.38	61.71	108.99	125.24	0.00	14543561.01	2063586.19	
1500.00	9.00	60.48	1490.15	69.42	122.60	140.89	0.00	14543568.72	2063599.80	
1600.00	9.00	60.48	1588.92	77.13	136.21	156.53	0.00	14543576.43	2063613.41	
1700.00	9.00	60.48	1687.69	84.83	149.82	172.17	0.00	14543584.13	2063627.02	
1800.00	9.00	60.48	1786.46	92.54	163.44	187.82	0.00	14543591.84	2063640.64	
1900.00	9.00	60.48	1885.22	100.25	177.05	203.46	0.00	14543599.55	2063654.25	
2000.00	9.00	60.48	1983.99	107.96	190.66	219.10	0.00	14543607.26	2063667.86	
2100.00	9.00	60.48	2082.76	115.66	204.28	234.75	0.00	14543614.96	2063681.48	
2200.00	9.00	60.48	2181.53	123.37	217.89	250.39	0.00	14543622.67	2063695.09	
2300.00	9.00	60.48	2280.30	131.08	231.50	266.04	0.00	14543630.38	2063708.70	
2400.00	9.00	60.48	2379.07	138.79	245.11	281.68	0.00	14543638.09	2063722.31	
2500.00	9.00	60.48	2477.84	146.50	258.73	297.32	0.00	14543645.80	2063735.93	
2600.00	9.00	60.48	2576.61	154.20	272.34	312.97	0.00	14543653.50	2063749.54	
2700.00	9.00	60.48	2675.37	161.91	285.95	328.61	0.00	14543661.21	2063763.15	
2724.93	9.00	60.48	2700.00	163.83	289.35	332.51	0.00	14543663.13	2063766.55	9 5/8" CSG PT
2800.00	9.00	60.48	2774.14	169.62	299.56	344.25	0.00	14543668.92	2063776.76	KOP
2900.00	11.50	60.48	2872.54	178.39	315.05	362.05	2.50	14543677.69	2063792.25	
3000.00	14.00	60.48	2970.07	189.26	334.25	384.11	2.50	14543688.56	2063811.45	
3100.00	16.50	60.48	3066.54	202.22	357.14	410.41	2.50	14543701.52	2063834.34	
3200.00	19.00	60.48	3161.77	217.24	383.67	440.90	2.50	14543716.54	2063860.87	
3300.00	21.50	60.48	3255.58	234.29	413.78	475.51	2.50	14543733.59	2063890.98	
3400.00	24.00	60.48	3347.79	253.34	447.43	514.18	2.50	14543752.64	2063924.63	
3500.00	26.50	60.48	3438.23	274.36	484.55	556.83	2.50	14543773.66	2063961.75	
3600.00	29.00	60.48	3526.72	297.30	525.06	603.39	2.50	14543796.60	2064002.26	
3640.00	30.00	60.48	3561.54	307.00	542.20	623.08	2.50	14543806.30	2064019.40	HOLD
3700.00	30.00	60.48	3613.50	321.79	568.31	653.08	0.00	14543821.09	2064045.51	
3800.00	30.00	60.48	3700.10	346.42	611.82	703.08	0.00	14543845.72	2064089.02	
3900.00	30.00	60.48	3786.70	371.06	655.32	753.08	0.00	14543870.36	2064132.52	
4000.00	30.00	60.48	3873.31	395.69	698.83	803.08	0.00	14543894.99	2064176.03	
4100.00	30.00	60.48	3959.91	420.33	742.34	853.08	0.00	14543919.63	2064219.54	
4200.00	30.00	60.48	4046.51	444.97	785.85	903.08	0.00	14543944.27	2064263.05	
4300.00	30.00	60.48	4133.11	469.60	829.36	953.08	0.00	14543968.90	2064306.56	
4400.00	30.00	60.48	4219.72	494.24	872.87	1003.08	0.00	14543993.54	2064350.07	
4500.00	30.00	60.48	4306.32	518.87	916.38	1053.08	0.00	14544018.17	2064393.58	
4600.00	30.00	60.48	4392.92	543.51	959.89	1103.08	0.00	14544042.81	2064437.09	
4700.00	30.00	60.48	4479.52	568.15	1003.40	1153.08	0.00	14544067.45	2064480.60	
4730.07	30.00	60.48	4505.57	575.55	1016.48	1168.12	0.00	14544074.85	2064493.68	DROP
4800.00	28.95	60.48	4566.44	592.51	1046.43	1202.53	1.50	14544091.81	2064523.63	
4900.00	27.45	60.48	4654.57	615.79	1087.55	1249.78	1.50	14544115.09	2064564.75	
5000.00	25.95	60.48	4743.90	637.93	1126.65	1294.71	1.50	14544137.23	2064603.85	
5100.00	24.45	60.48	4834.38	658.91	1163.70	1337.29	1.50	14544158.21	2064640.90	
5200.00	22.95	60.48	4925.95	678.71	1198.68	1377.49	1.50	14544178.01	2064675.88	
5300.00	21.45	60.48	5018.53	697.33	1231.56	1415.27	1.50	14544196.63	2064708.76	
5373.29	20.35	60.48	5087.00	710.21	1254.31	1441.42	1.50	14544209.51	2064731.51	WASATCH
5400.00	19.95	60.48	5112.07	714.75	1262.32	1450.62	1.50	14544214.05	2064739.52	
5500.00	18.45	60.48	5206.51	730.95	1290.93	1483.51	1.50	14544230.25	2064768.13	
5600.00	16.95	60.48	5301.77	745.93	1317.39	1513.91	1.50	14544245.23	2064794.59	
5700.00	15.45	60.48	5397.79	759.68	1341.67	1541.81	1.50	14544258.98	2064818.87	
5800.00	13.95	60.48	5494.52	772.18	1363.75	1567.19	1.50	14544271.48	2064840.95	
5895.01	12.53	60.48	5587.00	782.90	1382.68	1588.95	1.50	14544282.20	2064859.88	ENTER TARGET
5900.00	12.45	60.48	5591.87	783.44	1383.62	1590.03	1.50	14544282.74	2064860.82	
6000.00	10.95	60.48	5689.79	793.43	1401.27	1610.31	1.50	14544292.73	2064878.47	



<b>Company:</b> Anadarko-Kerr-McGee	<b>Date:</b> 9/25/2007	<b>Time:</b> 16:14:24	<b>Page:</b> 4
<b>Field:</b> UTAH COUNTY, UTAH (UTM Zone 12N-NAD 27)	<b>Co-ordinate(NE) Reference:</b>	<b>Site:</b> NBU 922-18C4CS PAD CDEF	
<b>Site:</b> NBU 922-18C4CS PAD CDEF	<b>Vertical (TVD) Reference:</b>	<b>SITE</b> 4908.0	
<b>Well:</b> 922-18C4CS	<b>Section (VS) Reference:</b>	<b>Well</b> (0.00N,0.00E,60.48Azi)	
<b>Wellpath:</b> 1	<b>Survey Calculation Method:</b>	<b>Minimum Curvature</b>	<b>Db:</b> Sybase

### Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
2724.93	2700.00	9.625	9.625	9 5/8" CSG PT

### Annotation

MD ft	TVD ft	
300.00	300.00	NUDGE
900.00	897.54	HOLD
2800.00	2774.14	KOP
3640.00	3561.54	HOLD
4730.07	4505.57	DROP
5895.01	5587.00	ENTER TARGET
6730.07	6415.42	HOLD
10184.65	0.00	PBHL

### Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
5373.29	5087.00	WASATCH		0.00	0.00
8103.65	7789.00	MESAVERDE		0.00	0.00

NBU 922-18C4CS  
SW/NW LOT 2, SEC. 18, T9S, R22E  
UINTAH COUNTY, UTAH  
UTU-0359

ONSHORE ORDER NO. 1

***MULTI-POINT SURFACE USE & OPERATIONS PLAN***

1. **Existing Roads:**

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. **Planned Access Roads:**

*Please see the Natural Buttes Unit Standard Operating Procedure (SOP).*

Approximately 170' +/- of access road is proposed. Please refer to the attached Topo Map B.

3. **Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

4. **Location of Existing & Proposed Facilities:**

*Please see the Natural Buttes Unit SOP.*

Approximately 20'' +/- of 10'' steel pipeline is proposed from the location to an existing pipeline. Refer to the attached Topo Map D.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

5. **Location and Type of Water Supply:**

*Please see the Natural Buttes SOP.*

6. **Source of Construction Materials:**

*Please see the Natural Buttes SOP.*

7. **Methods of Handling Waste Materials:**

*Please see the Natural Buttes SOP.*

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E (*Request is in lieu of filing Form 3160-5, after initial production*).

8. **Ancillary Facilities:**

*Please see the Natural Buttes SOP.*

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Culverts will be installed where needed.

A run off diversion for drainage will be constructed where needed.

The reserve pit will be lined. When the reserve pit is closed the pit liner will be buried below plow depth.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be re-surveyed and a form 3160-5 will be submitted.

10. **Plans for Reclamation of the Surface:**

*Please see the Natural Buttes SOP.*

11. **Surface Ownership:**

The well pad and access road are located on lands owned by:

Ute Indian Tribe  
P.O. Box 70  
Fort Duchesne, Utah 84026  
(435) 722-5141

12. **Other Information:**

A Class III Archaeological Survey Report has been conducted for this location and submitted to the Ute Indian Tribe prior to the on-site inspection.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within boundaries of the unit.



**13. Lessee's or Operator's Representative & Certification:**

Sheila Upchego  
Senior Land Admin Specialist  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7024

Randy Bayne  
Drilling Manager  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Indian Affairs Nationwide Bond #RLB0005239, Bureau of Land Management Nationwide Bond #WYB000291 and State of Utah Bond #RLB0005237.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
Sheila Upchego

11/5/2007

Date

**Kerr-McGee Oil & Gas Onshore LP**  
**NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS,**  
**D3BS, & D2S**  
**SECTION 18, T9S, R22E, S.L.B.&M.**

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 12.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHWEST; PROCEED IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN RIGHT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 170' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 48.0 MILES.

orig.

# Kerr-McGee Oil & Gas Onshore LP

NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, D3BS, & D2S

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 18, T9S, R22E, S.L.B.&M.

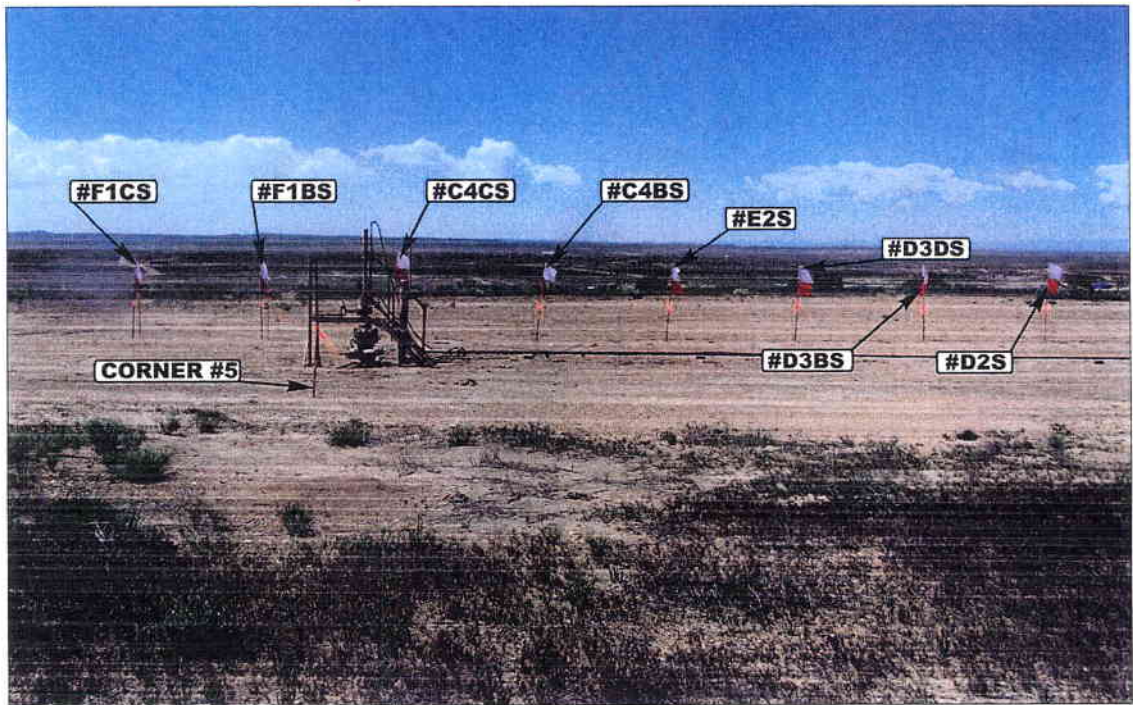


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: SOUTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: EASTERLY



- Since 1964 -

**UELS**

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

05 16 07  
MONTH DAY YEAR

PHOTO

TAKEN BY: L.K.

DRAWN BY: C.P.

REVISED: 00-00-00

















**Kerr-McGee Oil & Gas Onshore LP**  
**NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, D3BS, & D2S**  
**PIPELINE ALIGNMENT**  
**LOCATED IN UINTAH COUNTY, UTAH**  
**SECTION 18, T9S, R22E, S.L.B.&M.**

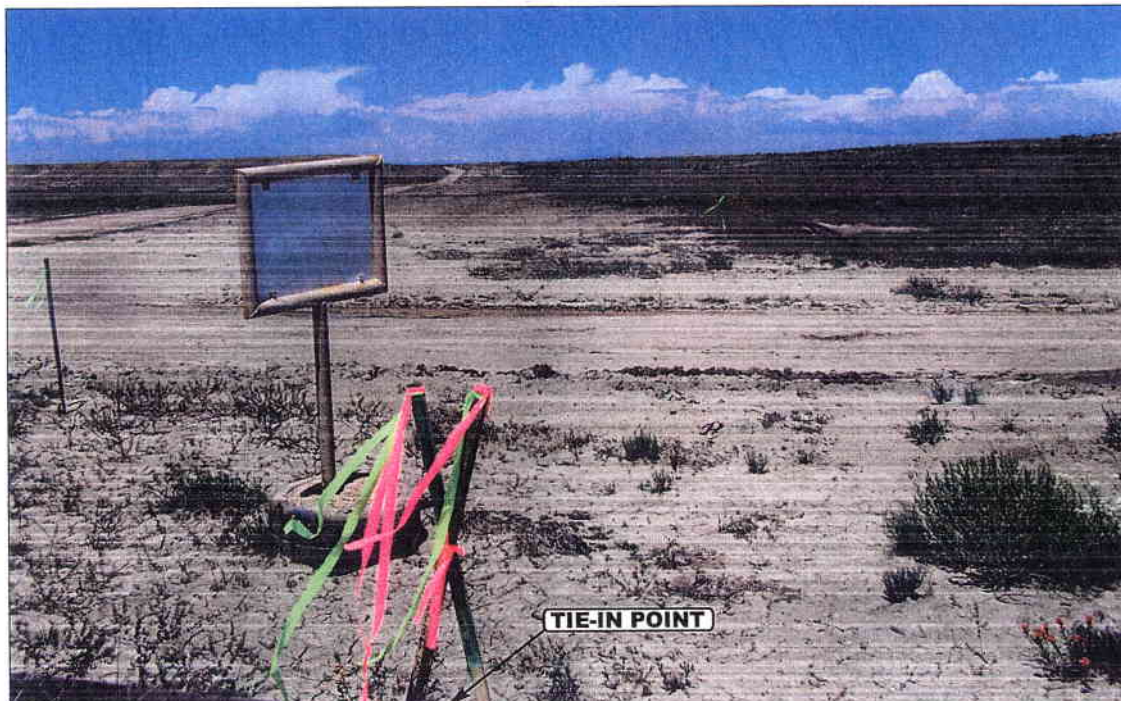


PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW OF PIPELINE ALIGNMENT

CAMERA ANGLE: NORTHWESTERLY



**UELS**

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

**PIPELINE PHOTOS**

**05 16 07**  
MONTH DAY YEAR

**PHOTO**

TAKEN BY: L.K.

DRAWN BY: C.P.

REVISED: 00-00-00



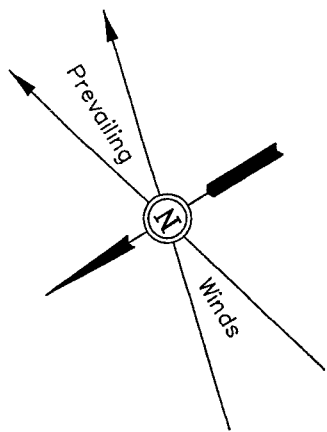
# Kerr-McGee Oil & Gas Onshore LP

## SITE PLAN LAYOUT FOR

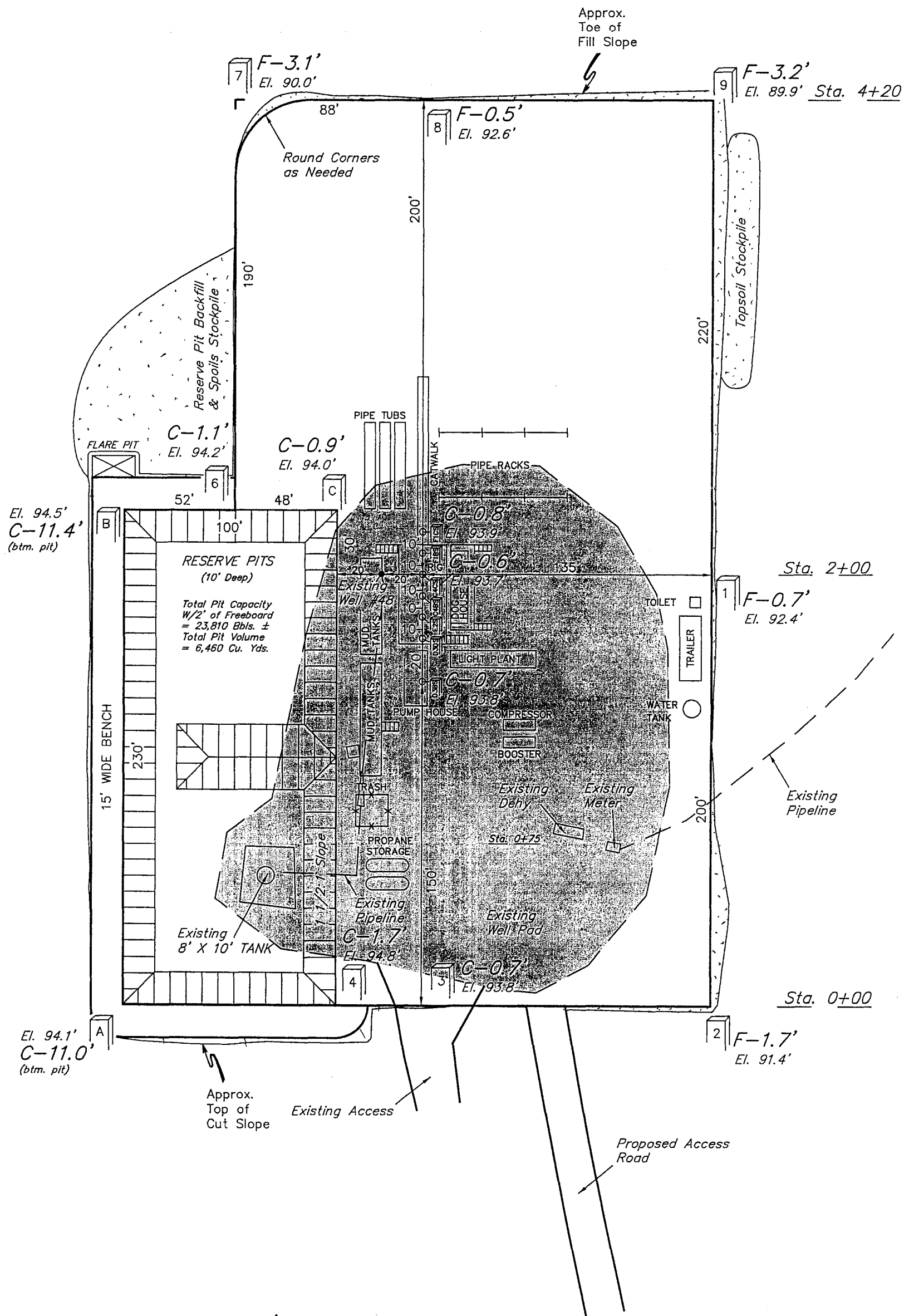
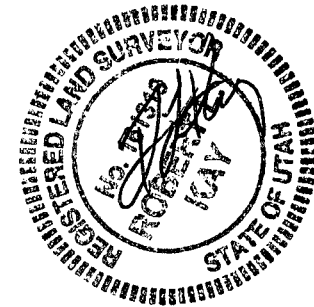
NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, & D3BS

SECTION 18, T9S, R22E, S.L.B.&M.

LOT2



SCALE: 1" = 50'  
DATE: 5-18-07  
Drawn By: C.H.  
REV: 10-22-07



### NOTES:

Elev. Ungraded Ground At #18C4CS Loc. Stake = 4893.7'  
FINISHED GRADE ELEV. AT #18C4CS LOC. STAKE = 4893.1'

# Kerr-McGee Oil & Gas Onshore LP

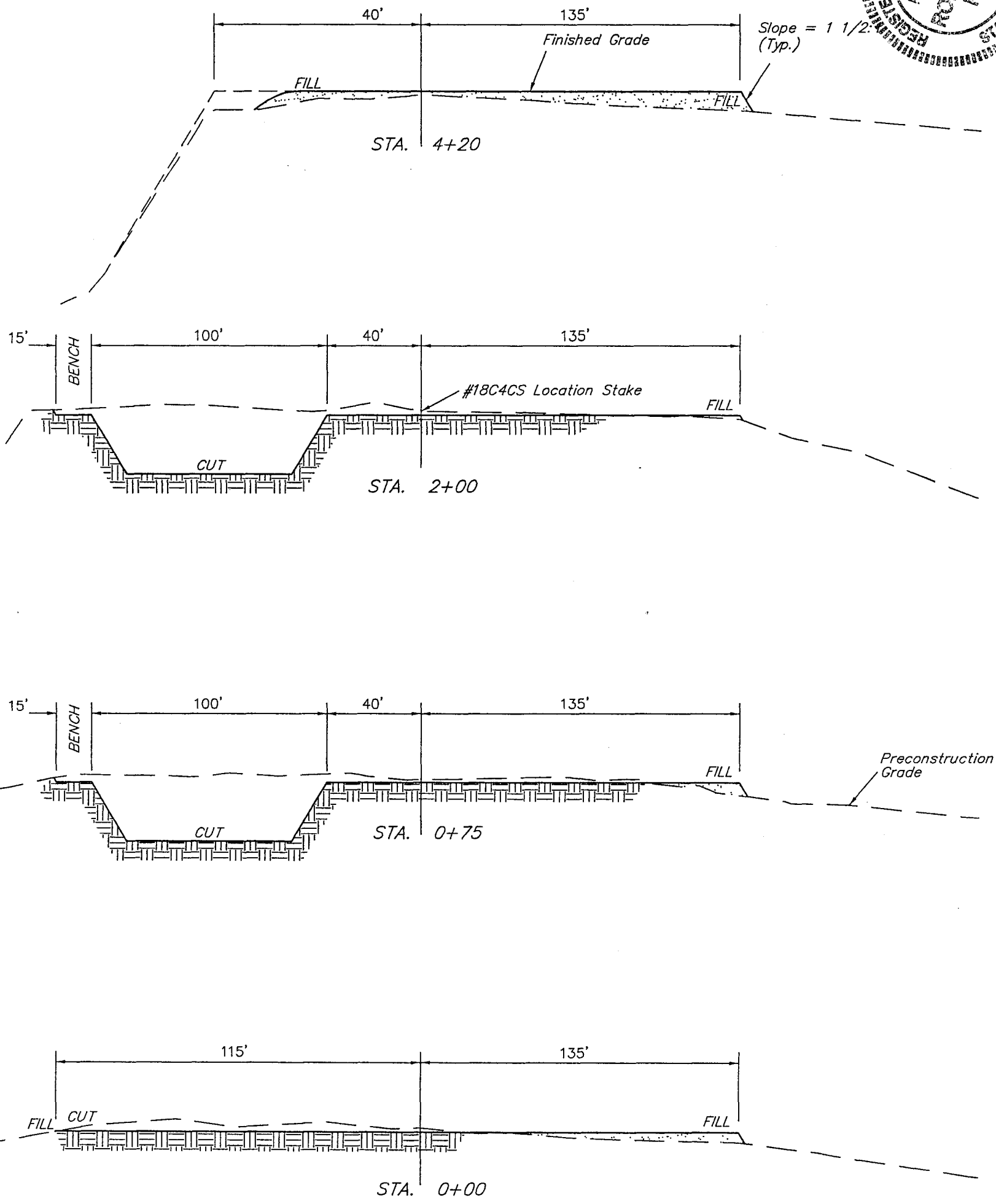
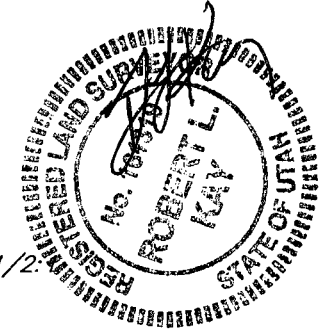
## TYPICAL CROSS SECTIONS FOR

NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, & D3BS  
SECTION 18, T9S, R22E, S.L.B.&M.  
LOT2

FIGURE #2

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 5-18-07  
Drawn By: C.H.  
REV: 10-22-07



### NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

### \* NOTE:

FILL QUANTITY INCLUDES 5% FOR COMPACTION

### APPROXIMATE YARDAGES

CUT  
(12") Topsoil Stripping = 4,410 Cu. Yds.  
Remaining Location = 6,670 Cu. Yds.  
TOTAL CUT = 11,080 CU.YDS.  
FILL = 3,440 CU.YDS.

EXCESS MATERIAL = 7,640 Cu. Yds.  
Topsoil & Pit Backfill = 7,640 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

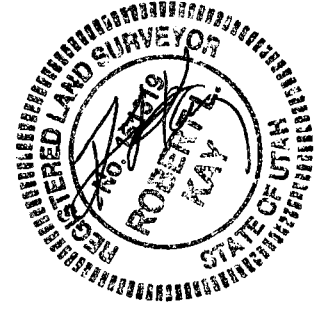
Kerr-McGee Oil & Gas Onshore LP

SITE PLAN LAYOUT FOR

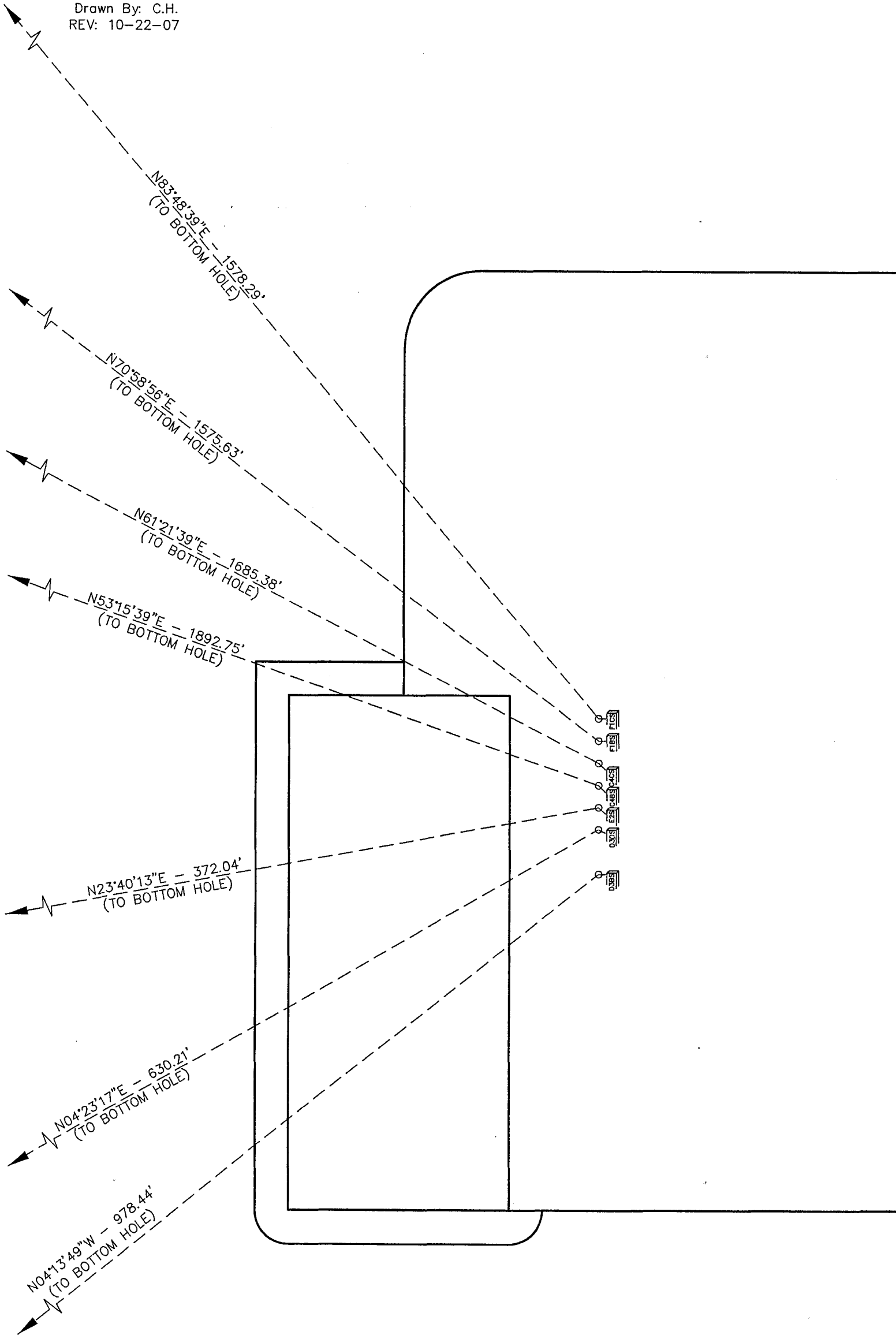
NBU #922-18C4CS, F1BS, F1CS, C4BS, E2S, D3DS, & D3BS

SECTION 18, T9S, R22E, S.L.B.&M.

LOT2



SCALE: 1" = 50'  
DATE: 5-18-07  
Drawn By: C.H.  
REV: 10-22-07



**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 11/20/2007

API NO. ASSIGNED: 43-047-39845

WELL NAME: NBU 922-18C4CS

OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )

PHONE NUMBER: 435-781-7024

CONTACT: SHEILA UPCHEGO

PROPOSED LOCATION:

SWNW 18 090S 220E

SURFACE: 1881 FNL 0370 FWL

BOTTOM: 1075 FNL 1849 FWL

COUNTY: UINTAH

LATITUDE: 40.03809 LONGITUDE: -109.4886

UTM SURF EASTINGS: 628948 NORTHINGS: 4432868

FIELD NAME: NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0359

PROPOSED FORMATION: WSMVD

SURFACE OWNER: 2 - Indian

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. RLB0005239 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 43-8496 )  
☒ RDCC Review (Y/N)  
(Date: )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

\_\_\_ R649-2-3.  
Unit: NATURAL BUTTES  
\_\_\_ R649-3-2. General  
Siting: 460' From Qtr/Qtr & 920' Between Wells  
\_\_\_ R649-3-3. Exception  
☒ Drilling Unit  
Board Cause No: 173-14  
Eff Date: 12-2-1999  
Siting: 460' fr uldary & uncomm. trails  
☒ R649-3-11. Directional Drill

COMMENTS:

*See Separate Bu*

STIPULATIONS:

*1- federal approval  
2- OIL SHALE*

PREPARED BY: DIANA MASON  
DATE: 29-NOVEMBER-2007

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:

3160

(UT-922)

November 30, 2007

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2007 Plan of Development Natural Buttes Unit  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2007 within the Natural Buttes Unit, Uintah County, Utah.

API #	WELL NAME	LOCATION
-------	-----------	----------

(Proposed PZ Wasatch/MesaVerde)

43-047-39821	NBU 922-18F4CS Sec 18	T09S R22E 2529 FSL 1248 FWL BHL Sec 18 T09S R22E 2406 FNL 1895 FWL
43-047-39822	NBU 922-18K2DS Sec 18	T09S R22E 2508 FSL 1282 FWL BHL Sec 18 T09S R22E 2099 FSL 1548 FWL
43-047-39823	NBU 922-18E3CS Sec 18	T09S R22E 2540 FSL 1231 FWL BHL Sec 18 T09S R22E 2632 FSL 0136 FWL
43-047-39824	NBU 922-18K1BS Sec 18	T09S R22E 2524 FSL 1256 FWL BHL Sec 18 T09S R22E 2602 FSL 1821 FWL
43-047-39825	NBU 922-18M3S Sec 18	T09S R22E 1688 FSL 0334 FWL BHL Sec 18 T09S R22E 0203 FSL 0571 FWL
43-047-39826	NBU 922-18L3S Sec 18	T09S R22E 1689 FSL 0274 FWL BHL Sec 18 T09S R22E 1390 FSL 0214 FWL
43-047-39827	NBU 922-18L2CS Sec 18	T09S R22E 1687 FSL 0344 FWL BHL Sec 18 T09S R22E 1994 FSL 0262 FWL

43-047-39828 NBU 922-18M2S Sec 18 T09S R22E 1689 FSL 0284 FWL  
BHL Sec 18 T09S R22E 1075 FSL 0232 FWL

43-047-39829 NBU 922-18P3S Sec 18 T09S R22E 1424 FSL 2605 FEL  
BHL Sec 18 T09S R22E 0203 FSL 0668 FEL

43-047-39830 NBU 922-18P2S Sec 18 T09S R22E 1436 FSL 2588 FEL  
BHL Sec 18 T09S R22E 0988 FSL 0745 FEL

43-047-39831 NBU 922-18N2S Sec 18 T09S R22E 1402 FSL 2637 FEL  
BHL Sec 18 T09S R22E 1278 FSL 1753 FWL

43-047-39832 NBU 922-18O3DS Sec 18 T09S R22E 1407 FSL 2629 FEL  
BHL Sec 18 T09S R22E 0165 FSL 2024 FEL

43-047-39833 NBU 922-18O3AS Sec 18 T09S R22E 1413 FSL 2621 FEL  
BHL Sec 18 T09S R22E 0465 FSL 1965 FEL

43-047-39834 NBU 922-18O1CS Sec 18 T09S R22E 1419 FSL 2613 FEL  
BHL Sec 18 T09S R22E 0687 FSL 1723 FEL

43-047-39835 NBU 922-18O1BS Sec 18 T09S R22E 1430 FSL 2596 FEL  
BHL Sec 18 T09S R22E 1046 FSL 1714 FEL

43-047-39836 NBU 922-18C4BS Sec 18 T09S R22E 1875 FNL 0362 FWL  
BHL Sec 18 T09S R22E 0745 FNL 1878 FWL

43-047-39837 NBU 922-18E2S Sec 18 T09S R22E 1870 FNL 0354 FWL  
BHL Sec 18 T09S R22E 1529 FNL 0503 FWL

43-047-39838 NBU 922-18F1CS Sec 18 T09S R22E 1892 FNL 0387 FWL  
BHL Sec 18 T09S R22E 1724 FNL 1956 FWL

43-047-39839 NBU 922-18N2AS Sec 18 T09S R22E 1396 FSL 2228 FWL  
BHL Sec 18 T09S R22E 1016 FSL 1617 FWL

43-047-39840 NBU 922-18L2BS Sec 18 T09S R22E 2513 FSL 1273 FWL  
BHL Sec 18 T09S R22E 2344 FSL 0223 FWL

43-047-39841 NBU 922-18D3BS Sec 18 T09S R22E 1853 FNL 0329 FWL  
BHL Sec 18 T09S R22E 0877 FNL 0256 FWL

43-047-39842 NBU 922-18J3S Sec 18 T09S R22E 1453 FSL 2564 FEL  
BHL Sec 18 T09S R22E 1888 FSL 2052 FEL

43-047-39843 NBU 922-18J1S Sec 18 T09S R22E 1447 FSL 2572 FEL  
BHL Sec 18 T09S R22E 2062 FSL 1665 FEL

43-047-39844 NBU 922-18I3S Sec 18 T09S R022E 1442 FSL 2580 FEL  
BHL Sec 18 T09S R022E 1346 FSL 0726 FEL

43-047-39845 NBU 922-18C4CS Sec 18 T09S R22E 1881 FNL 0370 FWL  
BHL Sec 18 T09S R22E 1075 FNL 1849 FWL

43-047-39846 NBU 922-18F1BS Sec 18 T09S R22E 1886 FNL 0379 FWL  
BHL Sec 18 T09S R22E 1375 FNL 1868 FWL

43-047-39847 NBU 922-18N2CS Sec 18 T09S R22E 1390 FSL 2220 FWL  
BHL Sec 18 T09S R22E 0775 FSL 1462 FWL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

bcc: File - Natural Buttes Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:11-30-07





JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

December 3, 2007

Kerr McKee Oil and Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078

Re: NBU 922-18C4CS Well, Surface Location 1881' FNL, 370' FWL, SW NW, Sec. 18,  
T. 9 South, R. 22 East, Bottom Location 1075' FNL, 1849' FWL, NE NW, Sec. 18,  
T. 9 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39845.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal Office



Operator: Kerr McKee Oil and Gas Onshore LP  
Well Name & Number NBU 922-18C4CS  
API Number: 43-047-39845  
Lease: UTU-0359

Surface Location: SW NW      Sec. 18      T. 9 South      R. 22 East  
Bottom Location: NE NW      Sec. 18      T. 9 South      R. 22 East

### Conditions of Approval

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division with 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281 office      (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
5. In accordance with Utah Admin. R. 649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.
6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.

RECEIVED

NOV - 7 2007

Form 3160-3  
(August 1999)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

2007 NOV 19 PM 12:33

BLM  
ONLINE  
OMB No. 1004-0136  
Expires November 30, 2000

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER			5. Lease Serial No. <b>UTU-0359 461</b>	
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone			6. If Indian, Allottee or Tribe Name <b>TRIBAL SURFACE</b>	
2. Name of Operator <b>KERR MCGEE OIL AND GAS ONSHORE LP</b>			7. If Unit or CA Agreement, Name and No. <b>UNIT #891008900A</b>	
3A. Address <b>1368 SOUTH 1200 EAST VERNAL, UT 84078</b>		3b. Phone No. (include area code) <b>(435) 781-7024</b>	8. Lease Name and Well No. <b>NBU 922-18C4CS</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>SW/NW 1881'FNL, 370'FWL (LOT 2)</b> At proposed prod. Zone <b>NE/NW 1075'FNL, 1849'FWL</b>			9. API Well No. <b>43 047 39845</b>	
14. Distance in miles and direction from nearest town or post office* <b>17 +/- MILES FROM OURAY, UTAH</b>			10. Field and Pool, or Exploratory <b>NATURAL BUTTES</b>	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>370'</b>			11. Sec., T., R., M., or Blk. and Survey or Area <b>SEC. 18, T9S, R22E</b>	
16. No. of Acres in lease <b>162.39</b>		17. Spacing Unit dedicated to this well <b>40.00</b>		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>REFER TO TOPO C</b>		20. BLM/BIA Bond No. on file <b>RLB0005239</b>		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>4894'GL</b>		22. Approximate date work will start* <b>UPON APPROVAL</b>		23. Estimated duration <b>TO BE DETERMINED</b>

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |   |
|---|---|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).   |
| 2. A Drilling Plan.   | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature 	Name (Printed/Typed) <b>SHEILA UPCHEGO</b>	Date <b>11/16/2007</b>
Title <b>SENIOR LAND ADMIN SPECIALIST</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>John Kunka</b>	Date <b>SEP 08 2008</b>
Title <b>Assistant Field Manager Lands &amp; Mineral Resources</b>		
Office <b>VERNAL FIELD OFFICE</b>		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

## CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

UDOGM

## NOTICE OF APPROVAL

RECEIVED

SEP 16 2008

DIV. OF OIL, GAS &amp; MINING

NO NOS - Posted 11/14/07  
08MIC0098A

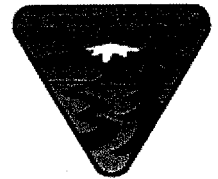


UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

**Company:** Kerr-McGee Oil & Gas Onshore, LP      **Location:** LOT 2, Sec. 18, T9S, R22E (S)  
NENW, Sec. 18, T9S, R22E (B)  
**Well No:** NBU 922-18C4CS      **Lease No:** UTU-461  
**API No:** 43-047-39845      **Agreement:** Natural Buttes Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	(435) 828-4029
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

**Fax: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Construction Activity	-	The Ute Tribe Energy & Minerals Dept. shall be notified in writing 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion	-	Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

***Surface COAs:***

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**SITE SPECIFIC COAs:**

**Additional Stipulations:**

None

**General Conditions of Approval**

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department is to be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.

- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel shall refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department shall be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.

**Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.**

***DOWNHOLE CONDITIONS OF APPROVAL (COAs)***

**SITE SPECIFIC DOWNHOLE COAs:**

- A surface casing shoe integrity test shall be performed.
- Production casing cement top shall be at a minimum of 200' above the surface casing shoe.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- Chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Wellogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.



## **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (1/41/4, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other Instructions on reverse side.**

1. Type of Well  
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator  
**Kerr-McGee Oil & Gas Onshore, LP**

3a. Address  
**P.O. Box 173779, Denver, CO 80217-3779**

3b. Phone No. (include area code)  
**720.929.6226**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**SW NW Sec. 18 T 9S R 22E**  
**1903 FNL 404 FWL**

5. Lease Serial No.  
**UTU-0359**

6. If Indian, Allottee, or Tribe Name  
**Ute Tribe**

7. If Unit or CA. Agreement Name and/or No.  
**UTU-63047A**

8. Well Name and No.  
**NBU 922-18C4CS**

9. API Well No.  
**43-047-39845**

10. Field and Pool, or Exploratory Area  
**Natural Buttes**

11. County or Parish, State  
**Utah**

**12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and abandon	<input type="checkbox"/> Temporarily Abandon	<b>Surface Location</b>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths or pertinent markers and sands. Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/ BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Kerr-McGee Oil & Gas Onshore, LP, respectfully notifies that the center stakes for the surface location have been moved to SWNW 1903' FNL & 404' FWL. The bottomhole location has not been changed.

COPY SENT TO OPERATOR

Date: **12-30-2008**

Initials: **KS**

628959X

40.038023

44328424

-109.488465

**Federal Approval of this  
Action is Necessary**

14. I hereby certify that the foregoing is true and correct.  
Name (Printed/ Typed)

**Kevin McIntyre**

Title

**Regulatory Analyst**

Signature

Date

**11/11/08**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by  
Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

**BRADLEY G. HILL**  
ENVIRONMENTAL MANAGER  
Office

Date **12-22-08**

Title 18 U.S.C. Section 1001 AND Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

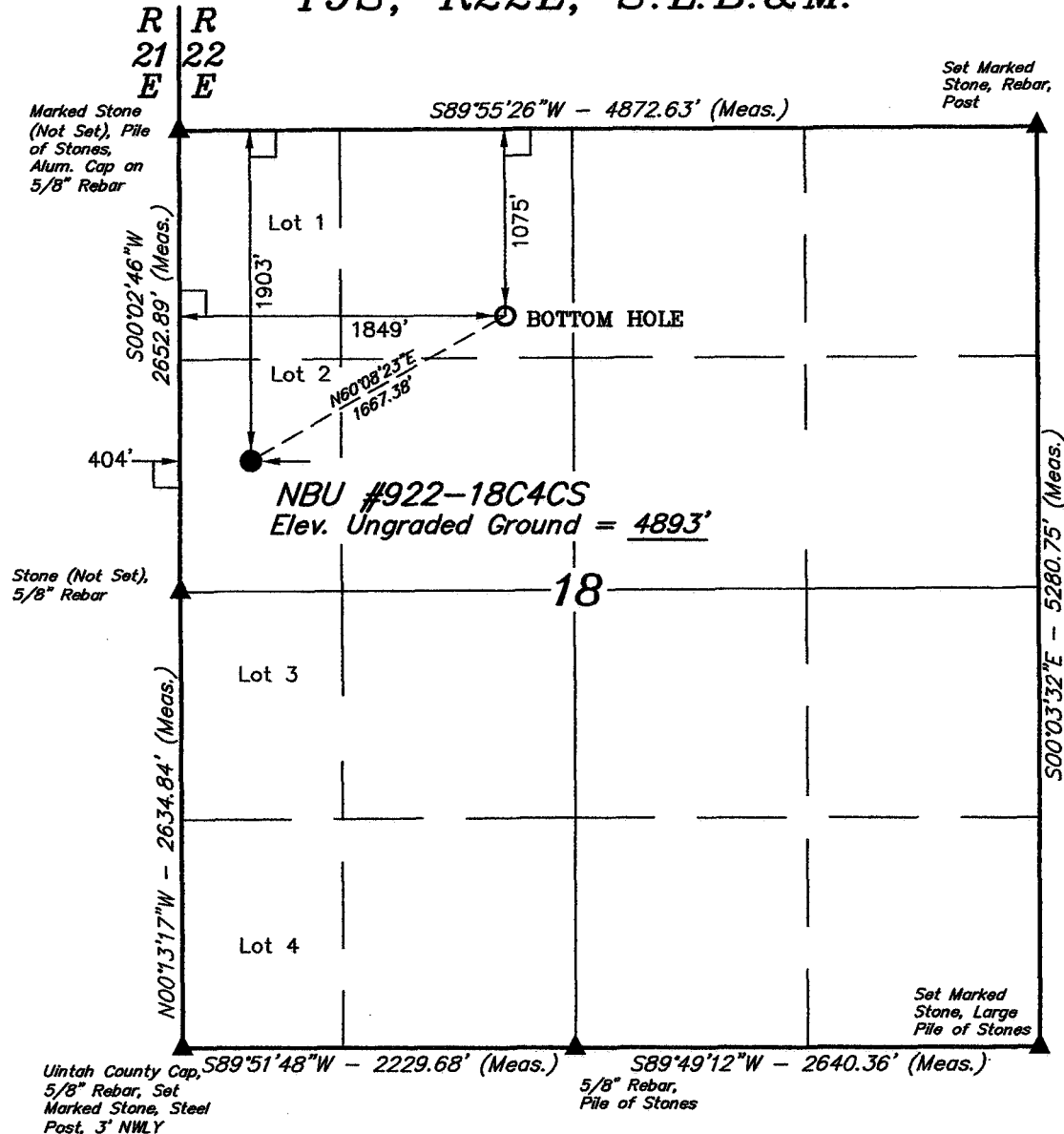
(Instructions on page 2)

**RECEIVED**

**NOV 17 2008**

**DIV. OF OIL, GAS & MINING**

T9S, R22E, S.L.B.&M.



# LEGEND:

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°02'25.08" (40.040300)	LATITUDE = 40°02'16.88" (40.038022)
LONGITUDE = 109°29'02.85" (109.484125)	LONGITUDE = 109°29'21.43" (109.489286)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°02'25.21" (40.040336)	LATITUDE = 40°02'17.01" (40.038058)
LONGITUDE = 109°29'00.38" (109.484389)	LONGITUDE = 109°29'18.96" (109.488600)

## Kerr-McGee Oil & Gas Onshore LP

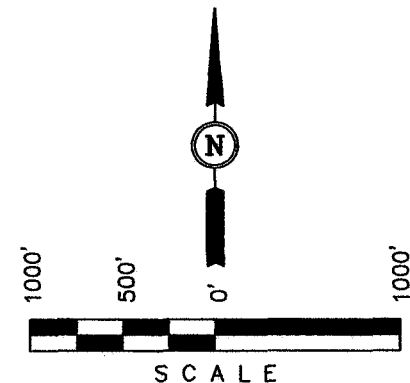
Well location, NBU #922-18C4CS, located as shown in Lot 2 of Section 18, T9S, R22E, S.L.B.&M., Uintah County, Utah.

## BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

## BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PART WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

REVISED: 10-29-08

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 05-07-07	DATE DRAWN: 05-17-07
PARTY D.K. L.K. C.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE Kerr-McGee Oil & Gas Onshore LP	



December 15, 2008

Mrs. Diana Mason  
Division of Oil, Gas, and Mining  
P.O. Box 145801  
Salt Lake City, UT 84114-6100

RE: <sup>43 047 39845</sup> Directional Drilling R649-3-11  
NBU 922-18C4CS  
T9S R22E  
Section 18: NENW  
SWNW 1903' FNL & 404' FWL (surface)  
NENW 1075' FNL & 1849' FWL (bottom hole)  
Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (Kerr-McGee) application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- Kerr-McGee's NBU 922-18C4CS is located within the Natural Buttes Unit area.
- Kerr-McGee is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Kerr-McGee will be able to utilize the existing road and pipelines in the area.
- Furthermore, Kerr-McGee certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information Kerr-McGee Oil & Gas Onshore, LP, requests the permit be granted pursuant to R649-3-11.

Sincerely,

KERR-McGEE OIL & GAS ONSHORE LP

A handwritten signature in black ink, appearing to read 'K. McIntyre'.

Kevin McIntyre  
Regulatory Analyst

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-0359
2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore, LP		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Tribe
3. ADDRESS OF OPERATOR: P.O. Box 173779 CITY Denver STATE CO ZIP 80217-3779 PHONE NUMBER: (720) 929-6226		7. UNIT or CA AGREEMENT NAME: 891008900A
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1903' FNL & 404' FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 18 9S 22E		8. WELL NAME and NUMBER: NBU 922-18C4CS
		9. API NUMBER: 4304739845
		10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field
		COUNTY: Uintah
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA			
TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <u>APD Extension</u>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, LP, respectfully requests a one year extension on this APD in order to complete drilling operations. The Utah Division of Oil, Gas, and Mining initially approved this APD on 12/03/2007.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: 12-22-08  
By: [Signature]

NAME (PLEASE PRINT) <u>Kevin McIntyre</u>	TITLE <u>Regulatory Analyst</u>
SIGNATURE <u>[Signature]</u>	DATE <u>12/9/2008</u>

(This space for State use only)

COPY SENT TO OPERATOR

Date: 12-30-2008

Initials: KS

(See Instructions on Reverse Side)

RECEIVED

DEC 11 2008

DIV. OF OIL, GAS & MINING

**Application for Permit to Drill  
Request for Permit Extension  
Validation**

(this form should accompany the Sundry Notice requesting permit extension)

**API:** 4304739845  
**Well Name:** NBU 922-18C4CS  
**Location:** SWNW 1903' FNL & 404' FWL, Sec. 18, T9S R22E  
**Company Permit Issued to:** Kerr-McGee Oil & Gas Onshore, LP  
**Date Original Permit Issued:** 12/3/2007

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes ☐ No ☒

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes ☐ No ☒

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes ☐ No ☒

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes ☐ No ☒

Has the approved source of water for drilling changed? Yes ☐ No ☒

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes ☐ No ☒

Is bonding still in place, which covers this proposed well? Yes ☒ No ☐

  
\_\_\_\_\_  
Signature

12/9/2008  
\_\_\_\_\_  
Date

Title: Regulatory Analyst

Representing: Kerr-McGee Oil & Gas Onshore, LP

**RECEIVED**  
**DEC 11 2008**  
**DIV. OF OIL, GAS & MINING**



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 922-18C4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1903 FNL 0404 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 18 Township: 09.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047398450000
<b>PHONE NUMBER:</b> 720 929-6587 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> <b>ACIDIZE</b>	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> <b>ALTER CASING</b>	
<input checked="" type="checkbox"/> <b>SPUD REPORT</b> Date of Spud: 5/29/2009	<input type="checkbox"/> <b>CASING REPAIR</b>	
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>	
	<input type="checkbox"/> <b>CHANGE TUBING</b>	
	<input type="checkbox"/> <b>CHANGE WELL STATUS</b>	
	<input type="checkbox"/> <b>COMMINGLE PRODUCING FORMATIONS</b>	
	<input type="checkbox"/> <b>DEEPEN</b>	
	<input type="checkbox"/> <b>FRACTURE TREAT</b>	
	<input type="checkbox"/> <b>OPERATOR CHANGE</b>	
	<input type="checkbox"/> <b>PLUG AND ABANDON</b>	
	<input type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	
	<input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>	
	<input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>	
	<input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>	
	<input type="checkbox"/> <b>TUBING REPAIR</b>	
	<input type="checkbox"/> <b>VENT OR FLARE</b>	
	<input type="checkbox"/> <b>WATER SHUTOFF</b>	
	<input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>	
	<input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>	
	<input type="checkbox"/> <b>OTHER:</b> _____	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL LOCATION ON 05/29/2009 AT 1230 HRS.		
<b>Accepted by the</b> <b>Utah Division of</b> <b>Oil, Gas and Mining</b> <b>FOR RECORD ONLY</b> June 01, 2009		
<b>NAME (PLEASE PRINT)</b> Sheila Upchego	<b>PHONE NUMBER</b> 435 781-7024	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/1/2009	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 922-18C4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1903 FNL 0404 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 18 Township: 09.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047398450000
<b>PHONE NUMBER:</b> 720 929-6007 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> <b>ACIDIZE</b>	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> <b>ALTER CASING</b>	
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> <b>CASING REPAIR</b>	
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 6/20/2009	<input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>	
	<input type="checkbox"/> <b>CHANGE TUBING</b>	
	<input type="checkbox"/> <b>CHANGE WELL STATUS</b>	
	<input type="checkbox"/> <b>COMMINGLE PRODUCING FORMATIONS</b>	
	<input type="checkbox"/> <b>DEEPEN</b>	
	<input type="checkbox"/> <b>FRACTURE TREAT</b>	
	<input type="checkbox"/> <b>OPERATOR CHANGE</b>	
	<input type="checkbox"/> <b>PLUG AND ABANDON</b>	
	<input type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	
	<input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>	
	<input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>	
	<input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>	
	<input type="checkbox"/> <b>TUBING REPAIR</b>	
	<input type="checkbox"/> <b>VENT OR FLARE</b>	
	<input type="checkbox"/> <b>WATER SHUTOFF</b>	
	<input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>	
	<input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>	
	<input type="checkbox"/> <b>OTHER:</b>	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> MIRU PROPETRO AIR RIG ON 06/18/2009. DRILLED 12 1/4" SURFACE HOLE TO 2830'. RAN 9 5/8" 40# J-55 SURFACE CSG. LEAD CMT W/270 SX HIFILL CLASS G @11.0 PPG 3.38 YIELD. TAILED CMT W/200 SX PREM CLASS G @15.8 PPG 1.15 YIELD. TOP OUT W/200 SX PREM CLASS G @15.8 PPG 1.05 YIELD. CMT TO SURFACE HOLE STAYED FULL. WORT		
<div style="text-align: right;"> <b>Accepted by the</b>  <b>Utah Division of</b>  <b>Oil, Gas and Mining</b>  <b>FOR RECORD ONLY</b>          June 24, 2009       </div>		
<b>NAME (PLEASE PRINT)</b> Sheila Wopsock	<b>PHONE NUMBER</b> 435 781-7024	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/24/2009	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 922-18C4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1903 FNL 0404 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 18 Township: 09.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047398450000
<b>PHONE NUMBER:</b> 720 929-6007 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> Uintah		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> <b>ACIDIZE</b>	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> <b>ALTER CASING</b>	
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> <b>CASING REPAIR</b>	
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 8/28/2009	<input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>	
	<input type="checkbox"/> <b>CHANGE TUBING</b>	
	<input type="checkbox"/> <b>CHANGE WELL STATUS</b>	
	<input type="checkbox"/> <b>COMMINGLE PRODUCING FORMATIONS</b>	
	<input type="checkbox"/> <b>DEEPEN</b>	
	<input type="checkbox"/> <b>FRACTURE TREAT</b>	
	<input type="checkbox"/> <b>OPERATOR CHANGE</b>	
	<input type="checkbox"/> <b>PLUG AND ABANDON</b>	
	<input type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	
	<input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>	
	<input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>	
	<input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>	
	<input type="checkbox"/> <b>TUBING REPAIR</b>	
	<input type="checkbox"/> <b>VENT OR FLARE</b>	
	<input type="checkbox"/> <b>WATER SHUTOFF</b>	
	<input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>	
	<input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>	
	<input type="checkbox"/> <b>OTHER:</b> _____	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>		
FINISHED DRILLING FROM 2,830' TO 10,180' ON 08/26/2009. RAN 4-1/2"		
11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS H2O W/ NO BREAK. LEAD CM		
W/ 625 SX PREM LITE @ 11.8 PPG, 2.42 YIELD. TAILED CMT W/ 1,278 SX		
50/50 POZ @ 14.3 PPG, 1.31 YIELD. FULL RETURNS @ 60 BBLS TAIL		
PUMPED/ DROP PLUG & DISPLACE W/ 158 BBLS H2O + ADDITIVES.		
RETURNS 45 BBLS INTO DISPLACEMENT W/ PARTIAL RETURNS		
THROUGHOUT DISPLACEMENT. LIFT PRESSURE @ 2630 PSI, BUMP PLUG W/		
3275 PSI, HOLD FIVE MIN. W/ NO LOSS. PLUG DOWN @ 11:00 HRS W/ NO		
CMT TO SURFACE, FLOATS HELD W/ 2.0 BBLS BACK TO INVENTORY.		
RELEASE H&P 298 RIG ON 08/28/2009 AT 13:00 HRS.		
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/31/2009	

**RECEIVED** August 31, 2009

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 922-18C4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1903 FNL 0404 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 18 Township: 09.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047398450000
<b>PHONE NUMBER:</b> 720 929-6007 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> Uintah		<b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> <b>ACIDIZE</b>	
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> <b>ALTER CASING</b>	
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> <b>CASING REPAIR</b>	
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 11/20/2009	<input type="checkbox"/> <b>CHANGE TO PREVIOUS PLANS</b>	
	<input type="checkbox"/> <b>CHANGE TUBING</b>	
	<input type="checkbox"/> <b>CHANGE WELL STATUS</b>	
	<input type="checkbox"/> <b>COMMINGLE PRODUCING FORMATIONS</b>	
	<input type="checkbox"/> <b>DEEPEN</b>	
	<input type="checkbox"/> <b>FRACTURE TREAT</b>	
	<input type="checkbox"/> <b>OPERATOR CHANGE</b>	
	<input type="checkbox"/> <b>PLUG AND ABANDON</b>	
	<input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	
	<input type="checkbox"/> <b>RECLAMATION OF WELL SITE</b>	
	<input type="checkbox"/> <b>REPERFORATE CURRENT FORMATION</b>	
	<input type="checkbox"/> <b>SIDETRACK TO REPAIR WELL</b>	
	<input type="checkbox"/> <b>TUBING REPAIR</b>	
	<input type="checkbox"/> <b>VENT OR FLARE</b>	
	<input type="checkbox"/> <b>WATER SHUTOFF</b>	
	<input type="checkbox"/> <b>SI TA STATUS EXTENSION</b>	
	<input type="checkbox"/> <b>WILDCAT WELL DETERMINATION</b>	
	<input type="checkbox"/> <b>OTHER:</b> _____	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b> THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 11/20/2009 AT 10:00 A.M. PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.		
<b>Accepted by the</b> <b>Utah Division of</b> <b>Oil, Gas and Mining</b> <b>FOR RECORD ONLY</b> November 23, 2009		
<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/23/2009	

# US ROCKIES REGION Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009		Spud Date: 6/17/2009	
Project: UTAH-UINTAH		Site: NBU 922-18E PAD			Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING		Start Date: 6/16/2009		End Date: 8/28/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNNW/6/PM/N/1,903.00/W/0/404.00/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/17/2009	7:00 - 11:30	4.50	MIRU	01	A	P		MIRU
	11:30 - 15:00	3.50	MIRU	01	B	P		RURT
	15:00 - 17:00	2.00	PRPSPD	06	A	P		P/U BIT #1,MUD MTR,,DIR TOOLS
	17:00 - 0:00	7.00	DRLSUR	02	D	P		DIR DRILL F,40 TO 490',SURVEY EVERY 90,
6/18/2009	0:00 - 14:30	14.50	DRLSUR	02	D	P		DIR DRILL 490' TO 1390 ,SURVEY 90',
	14:30 - 15:00	0.50	DRLSUR	07	A	P		RIG SERVICE
	15:00 - 0:00	9.00	DRLSUR	02	D	P		DIR DRILL F/1390 TO ,SURVEY EVERY 90,
6/19/2009	0:00 - 14:30	14.50	DRLSUR	02	D	P		DIR DRILL F/1780 TO 2290 ,SURVEY EVERY 90'
	14:30 - 15:00	0.50	DRLSUR	07	A	P		RIG SERVICE
	15:00 - 16:00	1.00	DRLSUR	08	B	Z		WORK ON PUMPS
	16:00 - 0:00	8.00	DRLSUR	02	D	P		DIR DRILL F/2290 TO 2530 ,SURVEY EVERY 90
6/20/2009	0:00 - 11:30	11.50	DRLSUR	02	D	P		DIR DRILLF/1830 TO 2760 ,
	11:30 - 12:00	0.50	DRLSUR	07	A	P		RIG SERVICE
	12:00 - 15:00	3.00	DRLSUR	02	D			DIR DRILL F/2760 TO 2830,SURVEY=16.82AZ 60.3, 20' HIGH & 3' LEFT
	15:00 - 16:00	1.00	DRLSUR	05	C	P		CIRC ,CLEAN HOLE TO LDDP
8/19/2009	16:00 - 19:00	3.00	CSG	06	D	P		LDDP & BHA F/CSG RUN
	19:00 - 22:00	3.00	CSG	12	C	P		RUN 65 JTS #40 J55 9.625 CSG TO 2812'
	22:00 - 0:00	2.00	CSG	12	E	P		PUMP CEMENT ,RIG RELEASE@ 23:59 6/20/09
	9:00 - 9:30	0.50	RDMO	01	E	P		RIG DOWN EQUIPMENT TO SKID
	9:30 - 10:00	0.50	RDMO	01	C	P		SKID RIG F/ NBU 922-18C4BS - T/ NBU 922-18C4CS
	10:00 - 10:30	0.50	RDMO	01	B	P		RIG UP EQUIPMENT AFTER SKID
	10:30 - 11:00	0.50	PRPSPD	14	A	P		NIPPLE UP B.O.P.E.
	11:00 - 16:00	5.00	PRPSPD	15	A	P		PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES , HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH @ 10 MINUTES / TEST SUPER CHOKE + SURFACE CASING TO 1500 PSI @ 30 MINUTES - FUNCTION TEST CLOSING UNIT - PASSED
	16:00 - 16:30	0.50	PRPSPD	07	A	P		SERVICE RIG & EQUIPMENT
	16:30 - 21:00	4.50	PRPSPD	06	A	P		MAKE UP & ORIENTATE M.W.D. TOOLS / PARTIAL & VISUAL INSPECTION ON H.W.D.P. WHILE T.I.H. / T.I.H. / INSTALL ROTATING RUBBER / TAD CEMENT @ 2772' / PRESSURE TEST PUMPS, LINES & TOP DRIVE TO 2500 P.S.I. BREAK CIRCULATION & DRILL FLOAT TRAC.
	21:00 - 22:00	1.00	PRPSPD	02	F	P		DRILL (ROTATE & SLIDE) F/ 2830" - T/ 2986' = 156' @ 78.0 FPH / WOB 10/14 / RPM TOP DRV 30-35 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1650/1400 / TQ ON/OFF 6K-3K / PU/SO/ROT 110/85/96 / H2O + POLY / SLIDE 10' IN .42 HRS = 6.4% OF FOOTAGE DRILLED & 21% OF HOURS DRILLED
	22:00 - 0:00	2.00	PRPSPD	02	D	P		

RECEIVED November 23, 2009

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )      Spud Conductor: 5/29/2009      Spud Date: 6/17/2009

Project: UTAH-UINTAH      Site: NBU 922-18E PAD      Rig Name No: ELENBURG 12/12, H&P 298/298

Event: DRILLING      Start Date: 6/16/2009      End Date: 8/28/2009

Active Datum: RKB @4,920.00ft (above Mean Sea Level)      UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/20/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL F/ 2971' - T/ 3482' = 511' @ 85.16 FPH / H2O + POLYMER / WOB 14K-17K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 1725/1450 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 119/95/105 / TORQUE ON/OFF BOTTOM 7K/3K / SLIDE 112' IN 2.69 HRS = 21.9% OF FOOTAGE DRILLED & 44.8% OF HOURS DRILLED
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILL F/ 3482' - T/ 4406' = 924' @ 80.3 FPH / H2O + POLYMER / WOB 18K-19K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 1960/1586 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 150/96/113 / TORQUE ON/OFF BOTTOM 6K/4K / SLIDE 248' IN 5.34 HRS = 26.8% OF FOOTAGE DRILLED & 46.4% OF HOURS DRILLED
	17:30 - 18:00	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL F/ 4406' - T/ 4750' = 344' @ 57.3 FPH / H2O + POLYMER / WOB 18K-19K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 1900/1585 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 150/102/121 / TORQUE ON/OFF BOTTOM 9K/5K / SLIDE 166' IN 3.09 HRS = 48.2% OF FOOTAGE DRILLED & 51.5% OF HOURS DRILLED
8/21/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 4750' - T/ 5048' = 298' @ 49.6 FPH / H2O + POLYMER / WOB 18K-19K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 1935/1610 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 160/100/126 / TORQUE ON/OFF BOTTOM 11K/6K / SLIDE 192' IN 4.0 HRS = 64.4% OF FOOTAGE DRILLED & 66.6% OF HOURS DRILLED
	6:00 - 17:00	11.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 5048' - T/ 5825' = 777' @ 70.63 FPH / H2O + POLYMER / WOB 18K-20K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2060/1660 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 165/110/135 / TORQUE ON/OFF BOTTOM 10K/7K / SLIDE 173' IN 4.0 HRS = 22.2% OF FOOTAGE DRILLED & 36.3% OF HOURS DRILLED
	17:00 - 17:30	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 5825' - T/ 6391' = 566' @ 87.01 FPH / H2O + POLYMER / WOB 18K-20K / TOP DRIVE RPM 35-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2450/2100 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT 200/111/146 / TORQUE ON/OFF BOTTOM 13K/9K / SLIDE 62' IN 2.67 HRS = 10.9% OF FOOTAGE DRILLED & 41.0% OF HOURS DRILLED

RECEIVED November 23, 2009



**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )	Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD	Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/22/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 6391' - T/ 6931' = 540' @ 90.0 FPH / H2O + POLYMER / WOB 18K-20K / TOP DRIVE RPM 35-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2450/2100 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT 220/115/153 / TORQUE ON/OFF BOTTOM 13K/10K / SLIDE 28' IN .75 HRS = 5.1% OF FOOTAGE DRILLED & 12.5% OF HOURS DRILLED
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 6931' - T/ 7532' = 601' @ 52.2 FPH / WOB 18K-20K / TOP DRIVE RPM 35-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2300/2075 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT 230/120/162 / TORQUE ON/OFF BOTTOM 14K/12K / SLIDE 40' IN 1.5 HRS = 6.6% OF FOOTAGE DRILLED & 13% OF HOURS DRILLED / START LITE MUD UP @ 7000' / ADDING WHOLE MUD FROM ON LOCATION STORAGE / 33 VIS - 9.3 PPG
	17:30 - 18:00	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 7532' - T/ 7735' = 230' @ 33.8 FPH / WOB 18K-21K / TOP DRIVE RPM 35-40 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2000 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 240/126/166 / TORQUE ON/OFF BOTTOM 14K/12K / SLIDE 34' IN 1.25 HRS = 14.7% OF FOOTAGE DRILLED & 20.8% OF HOURS DRILLED / 36 VIS - 9.6 PPG
8/23/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 7735' - T/ 7945' = 210' @ 35.0 FPH / WOB 20K-23K / TOP DRIVE RPM 35-40 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2330/2050 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 248/126/168 / TORQUE ON/OFF BOTTOM 14K/12K / SLIDE 28' IN 1.0 HRS = 13.3% OF FOOTAGE DRILLED & 16.6% OF HOURS DRILLED / 34 VIS - 9.8 PPG / WEIGHT RAISED TO CONTROL SHALE
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 7945' - T/ 8370' = 425' @ 36.9 FPH / WOB 19K-21K / TOP DRIVE RPM 30-35 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2430/2236 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 250/134/170 / TORQUE ON/OFF BOTTOM 16K/14K / SLIDE 40' IN 1.75 HRS = 9.4% OF FOOTAGE DRILLED & 15.2% OF HOURS DRILLED / 40 VIS - 10.5 PPG
	17:30 - 18:00	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 8370' - T/ 8590' = 220' @ 36.6 FPH / WOB 19K-21K / TOP DRIVE RPM 35-45 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2570/2300 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 245/130/174 / TORQUE ON/OFF BOTTOM 15K/14K / SLIDE 59' IN 2.5 HRS = 26.8% OF FOOTAGE DRILLED & 41.6% OF HOURS DRILLED / 40 VIS - 10.5 PPG

**RECEIVED** November 23, 2009

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/24/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 8590' - T/ 8774' = 184' @ 30.66 FPH / WOB 19K-21K / TOP DRIVE RPM 35-45 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2575/2310 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 248/131/175 / TORQUE ON/OFF BOTTOM 15K/13K / SLIDE 17' IN .83 HRS = 9.2% OF FOOTAGE DRILLED & 13.8% OF HOURS DRILLED / 43 VIS - 10.5 PPG
	6:00 - 18:00	12.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 8774' - T/ 9128' = 354' @ 29.5 FPH / WOB 19K-21K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2778/2545 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 258/140/180 / TORQUE ON/OFF BOTTOM 16K/14K / SLIDE 107' IN 4.5 HRS = 30.2% OF FOOTAGE DRILLED & 37.5% OF HOURS DRILLED / 44 VIS - 11.0 PPG / MUD WEIGHT RAISED TO CONTROL SHALE / HOLE TAKING FLUID - SWEEPS WOULD NOT HEAL - BYPASSED & ADDED 3% LCM TO ACTIVE SYSTEM
	18:00 - 18:30	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:30 - 0:00	5.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 9128' - T/ 9304' = 176' @ 32.0 FPH / WOB 19K-21K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2825/2600 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 270/140/184 / TORQUE ON/OFF BOTTOM 16K/14K / SLIDE 26' IN 1.75 HRS = 14.7% OF FOOTAGE DRILLED & 31.8% OF HOURS DRILLED / 44 VIS - 11.4 PPG - 3% LCM / RAISED MUD WEIGHT TO 11.4 PPG TO CONTROL GAS & STABILIZE HOLE FOR BIT TRIP / LOST APPROXIMATELY 175 BBLs TO HOLE LAST 24 HOURS
8/25/2009	0:00 - 0:30	0.50	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9304' - T/ 9311' = 7' @ 14 FPH / WOB 19K-22K / TOP DRIVE RPM 35-45 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2825/2600 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 270/140/184 / TORQUE ON/OFF BOTTOM 16K/14K / 100% OF FOOTAGE ROTATED / 44 VIS - 11.4 PPG / RAISE MUD WEIGHT TO CONTROL GAS & STABILIZE HOLE FOR BIT TRIP
	0:30 - 5:30	5.00	DRLPRO	06	A	P		P.O.O.H. @ 9311' W/ BIT #1 (PULL 4 STANDS - PUMP SLUG) / PULL ROTATING RUBBER @ B.H.A.
	5:30 - 6:30	1.00	DRLPRO	06	A	P		LAY DOWN M.W.D. TOOLS / BREAK BIT / LAY DOWN MOTOR / WORK BLIND & PIPE RAMS
	6:30 - 7:30	1.00	DRLPRO	06	A	P		MAKE UP MOTOR & BIT / INSTALL M.W.D. TOOLS & OREIANTATE MOTOR / SHALLOW TEST M.W.D. TOOLS
	7:30 - 11:30	4.00	DRLPRO	06	A	P		T.I.H. W/ BIT #2 / INSTALL ROTATING RUBBER / BREAK CIRCULATION AT SELECTED INTERVALS /
	11:30 - 12:00	0.50	DRLPRO	03	D	P		PRECAUTIONARY REAM F/ 9142' - T/ 9311' / CUT BIT PATTERN & SOFT START BIT / LOST APPROXIMATELY 44 BBLs MUD ON TRIP

RECEIVED November 23, 2009



**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH		Site: NBU 922-18E PAD	Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING		Start Date: 6/16/2009	End Date: 8/28/2009
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/26/2009	12:00 - 15:30	3.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 9311' - T/ 9426' = 115' @ 32.8 FPH / WOB 19K-22K / TOP DRIVE RPM 35-45 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2870/2700 PSI / MUD MOTOR RPM 72 / PU/SO/ROT WT 255/145/184 / TORQUE ON/OFF BOTTOM 16K/15K / SLIDE 20' IN 1.5 HOURS = 17.3% OF FOOTAGE & 42.8% OF TIME DRILLED / 43 VIS - 11.5 PPG - 4% LCM / HOLE SEEPING - RAISING L.C.M. TO 5% / LOST APPROXIMATELY 38 BBLS
	15:30 - 16:00	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / VISUAL INSPECTION ON B.O.P.E.
	16:00 - 0:00	8.00	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9426' - T/ 9685' = 259' @ 32.3 FPH / WOB 19K-22K / TOP DRIVE RPM 30-40 / PUMP 95 SPM = 428 GPM / PUMP PRESSURE ON/OFF BOTTOM 2700/2550 PSI / MUD MOTOR RPM 68 / PU/SO/ROT WT 280/140/192 / TORQUE ON/OFF BOTTOM 16K/15K / 45 VIS - 11.6 PPG - 5% LCM / LOST APPROXIMATELY 15 BBLS / TOTAL LOSSES = 97 BBLS
	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9685' - T/ 9816' = 131' @ 21.8 FPH / WOB 18K-21K / TOP DRIVE RPM 30-40 / PUMP 90 SPM = 405 GPM / PUMP PRESSURE ON/OFF BOTTOM 2375/2200 PSI / MUD MOTOR RPM 65 / PU/SO/ROT WT 290/148/192 / TORQUE ON/OFF BOTTOM 16K/14K / 100% OF FOOTAGE ROTATED / 44 VIS - 11.5 PPG - 5% LCM
	6:00 - 12:30	6.50	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9816' - T/ 9992' = 176' @ 27.1 FPH / WOB 18K-22K / TOP DRIVE RPM 30-45 / PUMP 88 SPM = 396 GPM / PUMP PRESSURE ON/OFF BOTTOM 2150/1975 PSI / MUD MOTOR RPM 63 / PU/SO/ROT WT 293/159/196 / TORQUE ON/OFF BOTTOM 14K/13K / 100% OF FOOTAGE ROTATED / 44 VIS - 11.7 PPG - 5% LCM
	12:30 - 21:30	9.00	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9992' - T/ 10180' (T.D.) = 188' @ 20.8 FPH / WOB 18K-23K / TOP DRIVE RPM 30-45 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2450/2300 PSI / MUD MOTOR RPM 72 / PU/SO/ROT WT 295/160/200 / TORQUE ON/OFF BOTTOM 16K/15K / 100% OF FOOTAGE ROTATED / 44 VIS - 11.8 PPG - 5% LCM / TOTAL LOSSES 24 HOURS = 45 BBLS
	12:30 - 12:30	0.00	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	21:30 - 22:30	1.00	DRLPRO	05	C	P		CIRCULATE & CONDITION HOLE FOR SHORT TRIP / ROTATE & RECIPROCATATE PIPE 90'
	22:30 - 0:00	1.50	DRLPRO	06	E	P		SHORT TRIP TO 2800' (ROTATE & PUMP OUT F/ 10180' - T/ 9520' - STRAIGHT PULL F/ 9520' - T/ 9145') / PUMP PILL / P.O.O.H.
	0:00 - 2:00	2.00	EVALPR	06	E	P		SHORT TRIP (ROTATE & PUMP OUT F/ 10180' - T/ 9520' - STRAIGHT PULL F/ 9520' - T/ 9145') / PUMP PILL / P.O.O.H. TO 2800'
8/27/2009	2:00 - 5:00	3.00	EVALPR	06	E	P		SHORT TRIP / T.I.H. - WASH THRU BRIDGE @ 7255' / T.I.H. / BREAKING CIRCULATION AT SELECTED INTERVALS
	5:00 - 5:30	0.50	EVALPR	03	D	P		PRECAUTIONARY REAM F/ 9992' - T/ 10180' W/ 4' FILL ON BOTTOM
	5:30 - 7:30	2.00	EVALPR	05	C	P		CIRCULATE & CONDITION HOLE FOR LOGS / SWEEP HOLE W/ HIGH VIS SWEEPS / LOST APPROX. 3 BBLS MUD TO HOLE / SPOT 50 VIS MUD IN HOLE

RECEIVED November 23, 2009

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH		Site: NBU 922-18E PAD	Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING		Start Date: 6/16/2009	End Date: 8/28/2009
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 13:00	5.50	EVALPR	06	B	P		P.O.O.H. FOR LOGS / PUMP/ROTAT OUT F/ 10180' - T/ 9041 / PUMP PILL / P.O.O.H. / LAY DOWN M.W.D. TOOLS / BREAK BIT & STAND BACK MOTOR + RELATED TOOLS
	13:00 - 15:30	2.50	EVALPR	11	D	P		SAFETY MEETING / M.I.R.U. HALLIBURTON LOGGING EQUIPMENT / R.I.H. - LOGS BRIDGED @ 8114' - UNABLE TO WORK THRU / ATTEMPT TO LOG UP - TOOLS FAILED / P.O.O.H. - SWAP OUT TOOLS - REMOVE BOW SPRING & FLEX JOINT / R.I.H.
	15:30 - 16:30	1.00	EVALPR	11	D	Z		ATTEMPT TO LOG UP - TOOLS FAILED / P.O.O.H. - SWAP OUT TOOLS - REMOVE BOW SPRING & FLEX JOINT / HALLIBURTON REDUCED TICKET BY \$1041.00 FOR 1 HOUR OF RIG TIME
	16:30 - 20:30	4.00	EVALPR	11	D	P		R.I.H. - HIT BRIDGE @ 8110' / COULD NOT WORK THROUGH / LOG UP W/ TRIPLE COMBO TOOLS F/ 8110' - T / SURFACE (2832') / R.D.M.O. HALLIBURTON EQUIPMENT
	20:30 - 21:00	0.50	CSG	14	B	P		PULL WEAR BUSHING / VISUAL INSPECTION ON B.O.P.E. / WORK PIPE & BLIND RAMS
	21:00 - 22:00	1.00	CSG	12	A	P		SAFETY MEETING / M.I.R.U. WEATHERFORD EQUIPMENT / INSPECT EQUIPMENT FOR PROPER RIG UP
	22:00 - 0:00	2.00	CSG	12	C	P		RUN 8 JTS P-110 #11.6 LT&C 4.5 CASING + 1 XO JT I-80 11.6# FROM LTC TO BTC,234 JTS I-80 #11.6 BTC 4.5 CASING + RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS
8/28/2009	0:00 - 6:00	6.00	CSG	12	C	P		FINISH RUN 8 JTS P-110 #11.6 LT&C 4.5 CASING + 1 XO JT I-80 11.6# FROM LTC TO BTC,234 JTS I-80 #11.6 BTC 4.5 CASING + RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS / PUSHED THROUGH BRIDGE @ 8110' W/ 40K / INSTALL SOLID MANDREL + ROTATING RUBBER / BREAK CIRCULATION / HOLD CASING @ 10169' WHILE CIRCULATING & CEMENTING
	6:00 - 7:30	1.50	CSG	05	D	P		CIRCULATE & CONDITION HOLE FOR CEMENT / R.D.M.O. CASING EQUIPMENT / SPOT B.J. CEMENTING EQUIPMENT / LOST FULL RETURNS 30 MINUTES INTO CIRCULATION / ADDED LCM TO MUD ON LOCATION & PUMPED APPROXIMATELY 420 BBLs WITH NO RETURNS / 48 VIS - 11.8 - 10% LCM

**RECEIVED** November 23, 2009

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SVNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 11:30	4.00	CSG	12		P		SAFETY MEETING (REVIEW J.S.A.) TEST PUMPS & LINES TO 4300 PSI / PUMP 40 BBLS H2O AT A RATE OF 8.6 BBP / PRESSURING UP TO 2000 PSI / PUMPED 20 MORE BBLS H2O W/ NO BREAK / STARTED + 625 SX LEAD CEMENT @ 11.8 ppg (PREM LITE II + .05lbs/sx STATIC FREE + .25 pps CELLOFLAKE + 5 pps KOL SEAL + 8% bwoc BENTONITE + .2% bwoc SODIUM METASILICATE + 203 BBLS H2O / (13.67 gal/sx, 2.42 yield) WITH NO CIRCULATION + 1278 SX TAIL @ 14.3 ppg (CLS G 50/50 POZ + 10% SALT + .05lbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE + 180BBLS H2O / (5.90 gal/sx, 1.31 yield) FULL RETURNS @ 60 BBLS TAIL PUMPED / DROP PLUG & DISPLACE W/ 158 BBLS H2O + ADDITIVES / LOST RETURNS 45 BBLS INTO DISPLACEMENT W/ PARTIAL RETURNS THROUGHOUT DISPLACEMENT / LIFT PRESSURE @ 2630 PSI (CALC TOP OF TAIL @ 3767') / BUMP PLUG W/ 3275 PSI - HOLD 5 MINUTES W/ NO LOSS / PLUG DOWN @ 11:00 HOURS W/ NO CEMENT TO SURFACE / FLOATS HELD W/ 2.0 BBLS BACK TO INVENTORY / R.D.M.O. CEMENT EQUIPMENT
	11:30 - 12:30	1.00	SUSPEN	14	A	P		LAND CASING W/ SHOE @ 10171' - TOP OF FLOAT COLLAR @ 10129' & TOP OF MARKER JOINT @ MARKER 5301' / LAY DOWN LANDING JOINT & ROTATING RUBBER
	12:30 - 13:00	0.50	CSG	14	A			NIPPLE DOWN B.O.P.E. / CLEAN PITS + RELATED EQUIPMENT / RELEASE RIG @ 13:00

RECEIVED November 23, 2009

# **US ROCKIES REGION** **Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No:
Event: COMPLETION	Start Date: 11/9/2009	End Date: 11/17/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/9/2009	7:00 - 18:00	11.00	COMP	36	B	P		<p>STG 1)PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH PER F/ 9872'-74', 4 SPF, 8 HOLES. 9742'-46', 4 SPF, 16 HOLES. 9682'-88', 3 SPF, 18 HOLES. POOH.</p> <p>WHP 480 PSI, BRK 3491 PSI @ 6.4 BPM. ISIP 2906 PSI, FG .73.</p> <p>PUMP 100 BBLS @ 49.6 BPM @ 5465 PSI = 100% HOLES OPEN.</p> <p>MP 6434 PSI, MR 49.9 BPM, AP 4936 PSI, AR 44.1 BPM, ISIP 2900 PSI, FG .73, NPI 6 PSI.</p> <p>PMP 1655 BBLS SW &amp; 57,737 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 62,737 LBS,</p> <p>STG 2)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9654' P/U PERF F/ 9622'-24', 4 SPF, 8 HOLES. 9554'-58', 4 SPF, 16 HOLES. 9480'-86', 3 SPF, 18 HOLES. POOH.</p>
11/10/2009	7:00 - 7:15	0.25	COMP	48		P		<p>HSM. SIM OPS.</p>

**RECEIVED** November 23, 2009

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH		Site: NBU 922-18E PAD	Rig Name No:
Event: COMPLETION		Start Date: 11/9/2009	End Date: 11/17/2009
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 17:00	9.75	COMP	36	B	P		<p>STG 2)WHP 2416 PSI, BRK 3437 PSI @ 6.4 BPM. ISIP 2890 PSI, FG .73. PUMP 100 BBLS @ 51.5 BPM @ 5443 PSI = 100% HOLES OPEN. MP 6465 PSI, MR 51.6 BPM, AP 4990 PSI, AR 43.9 BPM, ISIP 3056 PSI, FG .75, NPI 166 PSI. PMP 809 BBLS SW &amp; 24,719 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 29,719 LBS,</p> <p>STG 3)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9436' P/U PERF F/ 9402'-06', 3 SPF, 12 HOLES. 9368'-70', 4 SPF, 8 HOLES. 9196'-04', 3 SPF, 24 HOLES. POOH. WHP 2006 PSI, BRK 2429 PSI @ 6.4 BPM. ISIP 2333 PSI, FG .68. PUMP 100 BBLS @ 50.5 BPM @ 4331 PSI = 100% HOLES OPEN. MP 5534 PSI, MR 50.8 BPM, AP 4236 PSI, AR 48.2 BPM, ISIP 2420 PSI, FG .68, NPI 87 PSI. PMP 2767 BBLS SW &amp; 110,661 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 115,661 LBS, SWI.</p> <p>STG 4)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9094' P/U PERF F/ 9060'-64', 4 SPF, 16 HOLES. 9018'-24', 4 SPF, 24 HOLES. POOH WHP 2100 PSI, BRK 3745 PSI @ 6.4 BPM. ISIP 2615 PSI, FG .72. PUMP 100 BBLS @ 50.5 BPM @ 5000 PSI = 100% HOLES OPEN. MP 5681 PSI, MR 50.7 BPM, AP 4423 PSI, AR 43.7 BPM, ISIP 2645 PSI, FG .72, NPI 30 PSI. PMP 814 BBLS SW &amp; 24,733 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 29,733 LBS,</p> <p>STG 5)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8688' P/U PERF F/ 8652'-58', 4 SPF, 24 HOLES. 8594'-98', 4 SPF, 16 HOLES. POOH. WHP 875 PSI, BRK 3734 PSI @ 6.4 BPM. ISIP 2060 PSI, FG .67. PUMP 100 BBLS @ 50.5 BPM @ 4700 PSI = 90% HOLES OPEN. MP 5465 PSI, MR 50.8 BPM, AP 4203 PSI, AR 46.5 BPM, ISIP 2674 PSI, FG .74, NPI 614 PSI. PMP 1346 BBLS SW &amp; 49,898 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 54,898 LBS,</p>

RECEIVED November 23, 2009



# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No:
Event: COMPLETION	Start Date: 11/9/2009	End Date: 11/17/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNNW/6/PM/N/1,903.00W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/11/2009	7:00 - 17:00	10.00	COMP	36	B	P		<p>STG 6)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 8358' P/U PERF F/ 8326'-28', 4 SPF, 8 HOLES. 8288'-92', 3 SPF, 12 HOLES. 8234'-40', 3 SPF, 18 HOLES. POOH. SWI, SDFN.</p> <p>STG 6)WHP 951 PSI, BRK 3224 PSI @ 6.4 BPM. ISIP 1817 PSI, FG .65. PUMP 100 BBLS @ 00.0 BPM @ 0000 PSI = 00% HOLES OPEN. MP 5431 PSI, MR 51.6 BPM, AP 4138 PSI, AR 46.4 BPM, ISIP 2505 PSI, FG .73, NPI 688 PSI. PMP 845 BBLS SW &amp; 27,293 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 32,293 LBS,</p>
								<p>STG 7)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8112' P/U PERF F/ 8076'-82', 3 SPF, 18 HOLES. 8060'-62', 3 SPF, 6 HOLES. 8008'-14', 3 SPF, 18 HOLES. POOH.</p> <p>WHP 1120 PSI, BRK 2619 PSI @ 6.4 BPM. ISIP 1307 PSI, FG .59. PUMP 100 BBLS @ 50.5 BPM @ 4300 PSI = 67% HOLES OPEN. MP 4824 PSI, MR 51.2 BPM, AP 4119 PSI, AR 47.9 BPM, ISIP 2820 PSI, FG .78, NPI 1513 PSI. PMP 1643 BBLS SW &amp; 63,875 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 68,875 LBS,</p>
11/16/2009	6:45 - 7:00	0.25	COMP	48		P		<p>PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 7958'. POOH.N SWI.</p>
	7:00 - 15:30	8.50	COMP	31	I	P		<p>JSA- RDSU/ RUSU. PU TBG.</p> <p>RDSU FROM 18F1CS. MOVE OVER AND RUSU ON 18C4CS. ND FRAC VALVES. NU BOP. RU FLOOR AND TBG EQUIP. SPOT IN TBG. MU 3-7/8" HURRICANE MILL, POBS, 1.87" XN NIPPLE AND RIH AS MEAS AND PU 251 JTS 2-3/8" L-80 TBG. TAG SAND AT 7933'. RU DRLG EQUIP W/ #251. FLUSH LINES. DRAIN EQUIP. SDFN W/ EOT AT 7905'.</p>
11/17/2009	6:45 - 7:00	0.25	COMP	48		P		<p>JSA- D/O PLUGS. PUMP AND COLD WEATHER.</p>

RECEIVED November 23, 2009

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No:
Event: COMPLETION	Start Date: 11/9/2009	End Date: 11/17/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SVNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 18:00	11.00	COMP	44	C	P		<p>OPEN WELL AND WARM EQUIP. (1-FROZEN LINE) FILL HOLE AND P-TEST TO 3000 PSI. GOOD. EST CIRC AND D/O PLUGS.</p> <p>#1- C/O 14' SAND TO CBP AT 7958'. D/O PLUG IN 8 MIN. 100# INC. RIH.</p> <p>#2- C/O 5' SAND TO CBP AT 8112'. D/O PLUG IN 6 MIN. 150# INC. RIH.</p> <p>#3- C/O 37' SAND TO CBP AT 8358'. D/O PLUG IN 30 MIN. 50# INC. RIH.</p> <p>#4- C/O 38' SAND TO CBP AT 8688'. D/O PLUG IN 38 MIN. 50# INC. RIH.</p> <p>#5- C/O 33' SAND TO CBP AT 9094'. D/O PLUG IN 15 MIN. 50# INC. RIH.</p> <p>#6- C/O 30' SAND TO CBP AT 9436'. D/O PLUG IN 45 MIN. 250# INC.</p> <p>PLUG PUSHED UP 20K. LET PLUG EQUALIZE TO GET MOVING DOWN. RIH.</p> <p>SUSPECTING PROBLEMS WITH PWR SWIVEL. SWAP OUT PWR SWIVELS. NOT PWR SWIVEL. HOLE IS VERY DEVIATED. HAVE TORQUE TURNED UP TO 2100 FT LBS AND CAN ONLY ROTATE WHEN TBG IS MOVING UP OR DOWN. RIH.</p> <p>#7- C/O 32' SAND TO CBP AT 9654'. D/O PLUG IN 60 MIN. 300# INC.</p> <p>PLUG PUSHED UP 30K. LET PLUG EQUALIZE. ABLE TO GET JT DOWN. DRAIN EQUIP AND LINES. HOOK UP WELL TO FLOW ON 48/64 CHOKE. SDFN</p>
11/19/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2500#, TP 1475#, 20/64" CK, 42 BWPH, LIGHT SAND, LIGHT GAS</p> <p>TTL BBLS RECOVERED: 5075</p> <p>BBLS LEFT TO RECOVER: 4804</p>
11/20/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2525#, TP 1500#, 20/64" CK, 36 BWPH, LIGHT SAND, MEDIUM GAS</p> <p>TTL BBLS RECOVERED: 6005</p> <p>BBLS LEFT TO RECOVER: 3874</p>
	10:00 -		PROD	50				<p>WELL TURNED TO SALE @ 1000 HR ON 11/20/09 - FTP 1550#, CP 2575#, 1.3 MCFD, 36 BWPD, 20/64 CK</p>
11/21/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2450#, TP 1525#, 20/64" CK, 30 BWPH, LIGHT SAND, - GAS</p> <p>TTL BBLS RECOVERED: 6783</p> <p>BBLS LEFT TO RECOVER: 3096</p>
11/22/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2600#, TP 1725#, 20/64" CK, 20 BWPH, LIGHT SAND, - GAS</p> <p>TTL BBLS RECOVERED: 7351</p> <p>BBLS LEFT TO RECOVER: 2528</p>
11/23/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2550#, TP 1675#, 20/64" CK, 16 BWPH, TRACE SAND, - GAS</p> <p>TTL BBLS RECOVERED: 7787</p> <p>BBLS LEFT TO RECOVER: 2092</p>

RECEIVED November 23, 2009

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other			5. Lease Serial No. UTU0359		
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____			6. If Indian, Allottee or Tribe Name		
2. Name of Operator KERR-MCGEE OIL&GAS ONSHORE			8. Lease Name and Well No. NBU 922-18C4CS		
3. Address P.O. BOX 173779 DENVER, CO 80217			9. API Well No. 43-047-39845		
3a. Phone No. (include area code) Ph: 720-929-6100			10. Field and Pool, or Exploratory NATURAL BUTTES		
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface SWNW 1903FNL 404FWL 40.03806 N Lat, 109.48860 W Lon At top prod interval reported below NENW 1073FNL 1848FWL At total depth NENW 1088FNL 1857FWL			11. Sec., T., R., M., or Block and Survey or Area Sec 18 T9S R22E Mer		
14. Date Spudded 05/29/2009			15. Date T.D. Reached 08/26/2009		
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 11/20/2009			17. Elevations (DF, KB, RT, GL)* 4894 GL		
18. Total Depth: MD 10180 TVD 9924			19. Plug Back T.D.: MD 10130 TVD 9874		
20. Depth Bridge Plug Set: MD TVD			21. Type Electric & Other Mechanical Logs Run (Submit copy of each) CHI TRIPLE COMBO BHV-ACRT/DSN/SDL, RPM, CBL		
22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)					

## 23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STEEL	36.7		40		28			
12.250	9.625 J-55	40.0		2829		670			
7.875	4.500 I-80	11.6		10170		1905			

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

## 25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	8008	9874	8008 TO 9874	0.360	288	OPEN
B)						
C)						
D)						

## 26. Perforation Record

## 27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
8008 TO 9874	PMP 9,879 BBLs SLICK H2O & 393,916 LBS 30/50 SD.

RECEIVED

DEC 21 2009

DIV. OF OIL, GAS &amp; MINING

## 28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
11/20/2009	11/27/2009	24	→		1792.0	75.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
20/64	1290	2068.0	→		1792	75		PGW	

## 28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #78861 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

## 28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

## 28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)  
SOLD

## 30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER MAHOGANY WASATCH MESAVERDE	1834 2473 5339 8039	7988 10052			

## 32. Additional remarks (include plugging procedure):

ATTACHED TO THIS COMPLETION REPORT IS THE CHRONOLOGICAL WELL HISTORY AND END OF WELL REPORT.

RECEIVED

DEC 21 2009

DIV. OF OIL, GAS &amp; MINING

## 33. Circle enclosed attachments:

- |   |                    |               |                       |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7 Other:      |                       |

## 34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #78861 Verified by the BLM Well Information System.  
For KERR-MCGEE OIL&GAS ONSHORE, LP, sent to the Vernal

Name (please print) ANDY LYTLETitle REGULATORY ANALYSTSignature  (Electronic Submission)Date 12/15/2009

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***



# **ANADARKO PETROLEUM CORP.**

**UINTAH COUNTY, UTAH (nad 27)**

**NBU 922-18E PAD**

**NBU 922-18C4CS**

**NBU 922-18C4CS**

**Survey: FINAL**

## **Standard Survey Report**

**27 August, 2009**

**RECEIVED**

**DEC 21 2009**

**DIV. OF OIL, GAS & MINING**



**Weatherford®**



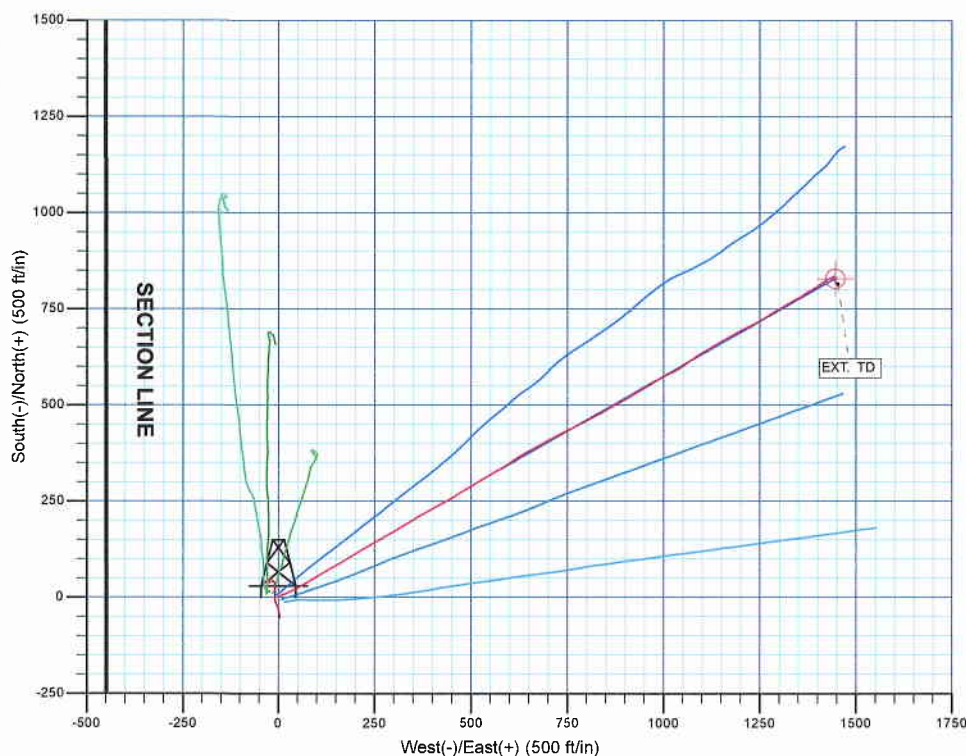
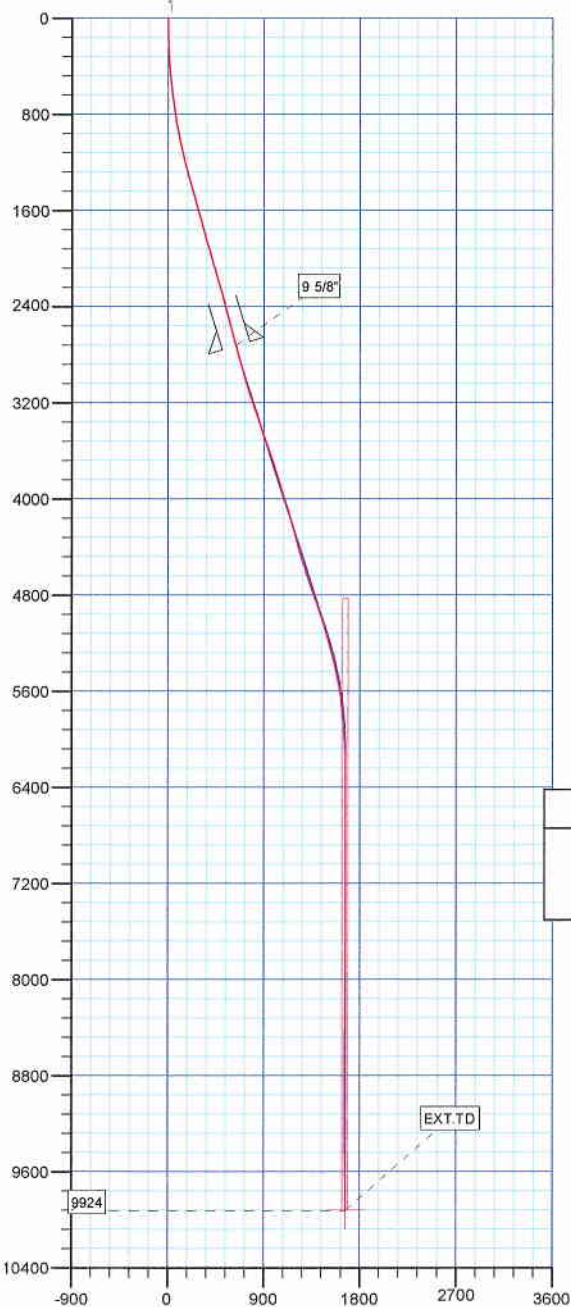


WELL DETAILS: NBU 922-18C4CS						
+N/-S	+E/-W	Northing	Ground Level: 4894.00 Easting	Latitude	Longitude	Slot
0.00	0.00	14543492.49	2063469.89	40° 2' 17.008 N	109° 29' 18.965 W	

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
	2775.00	16.82	60.30	2688.56	314.23	542.42	0.00	0.00	626.86	
	2930.00	16.82	60.30	2836.93	336.45	581.38	0.00	0.00	671.71	
	3052.33	19.88	60.27	2953.03	355.54	614.82	2.50	-0.21	710.22	
	5362.88	19.88	60.27	5125.91	745.18	1297.03	0.00	0.00	1495.85	
	6356.79	0.00	0.00	6100.00	829.84	1445.25	2.00	180.00	1666.55	
	10176.79	0.00	0.00	9920.00	829.84	1445.25	0.00	0.00	1666.55	PBHL_NBU 922-18C4CS

CASING DETAILS			
TVD	MD	Name	Size
2723.982812.00		9 5/8"	9.62

KB ELEV: WELL @ 4920.00ft (Original Well Elev)  
GRD ELEV: 4894.00



WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)									
PBHL	Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
		9920.00	829.84	1445.2514544346.74	2064900.85	40° 2' 25.210 N	109° 29' 0.380 W		Circle (Radius: 25.00)

**RECEIVED**  
**DEC 21 2009**  
DIV. OF OIL, GAS & MINING

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** NBU 922-18E PAD  
**Well:** NBU 922-18C4CS  
**Wellbore:** NBU 922-18C4CS  
**Design:** NBU 922-18C4CS

**Local Co-ordinate Reference:** Well NBU 922-18C4CS  
**TVD Reference:** WELL @ 4920.00ft (Original Well Elev)  
**MD Reference:** WELL @ 4920.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

<b>Project</b>	UINTAH COUNTY, UTAH (nad 27),		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

Site	NBU 922-18E PAD, SECTION 18 T9S R22E				
Site Position:		Northing:	14,543,514.70 ft	Latitude:	40° 2' 17.233 N
From:	Lat/Long	Easting:	2,063,436.85 ft	Longitude:	109° 29' 19.385 W
Position Uncertainty:	0.00 ft	Slot Radius:	in	Grid Convergence:	0.97 °

Well	NBU 922-18C4CS					
Well Position	+N/-S	0.00 ft	Northing:	14,543,492.49 ft	Latitude:	40° 2' 17.008 N
	+E/-W	0.00 ft	Easting:	2,063,469.89 ft	Longitude:	109° 29' 18.965 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,894.00 ft

<b>Wellbore</b>	NBU 922-18C4CS				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2008	8/12/2009	11.34	65.98	52,550

<b>Design</b>	NBU 922-18C4CS				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	63.44	

<b>Survey Program</b>	<b>Date</b> 8/27/2009				
<b>From</b>	<b>To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
(ft)	(ft)				
103.00	10,180.00	Survey #1 (NBU 922-18C4CS)	MWD	MWD - Standard	

<b>Survey</b>									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103.00	0.36	55.62	103.00	0.18	0.27	0.32	0.35	0.35	0.00
194.00	1.82	56.29	193.98	1.15	1.71	2.04	1.60	1.60	0.74
287.00	3.33	53.95	286.88	3.56	5.12	6.17	1.63	1.62	-2.52
382.00	5.03	66.53	381.63	6.84	11.17	13.05	2.02	1.79	13.24
477.00	5.88	68.26	476.20	10.30	19.51	22.06	0.91	0.89	1.82
573.00	7.25	65.99	571.57	14.59	29.61	33.01	1.45	1.43	-2.36
668.00	8.25	63.61	665.70	20.05	41.19	45.81	1.11	1.05	-2.51
763.00	9.50	59.74	759.56	27.03	54.07	60.45	1.46	1.32	-4.07
858.00	10.69	59.74	853.09	35.43	68.45	77.07	1.25	1.25	0.00
953.00	12.13	59.48	946.21	44.94	84.66	95.82	1.52	1.52	-0.27
1,048.00	13.56	59.61	1,038.83	55.64	102.87	116.22	1.51	1.51	0.14
1,145.00	15.19	59.36	1,132.79	67.87	123.61	140.64	1.68	1.68	-0.26

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** NBU 922-18E PAD  
**Well:** NBU 922-18C4CS  
**Wellbore:** NBU 922-18C4CS  
**Design:** NBU 922-18C4CS

**Local Co-ordinate Reference:** Well NBU 922-18C4CS  
**TVD Reference:** WELL @ 4920.00ft (Original Well Elev)  
**MD Reference:** WELL @ 4920.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,240.00	16.31	60.24	1,224.22	80.83	145.90	166.65	1.21	1.18	0.93
1,335.00	17.31	59.86	1,315.16	94.55	169.71	194.07	1.06	1.05	-0.40
1,430.00	17.63	58.11	1,405.78	109.25	194.14	222.50	0.65	0.34	-1.84
1,526.00	17.56	58.74	1,497.29	124.44	218.87	251.41	0.21	-0.07	0.66
1,621.00	17.44	60.86	1,587.89	138.81	243.55	279.92	0.68	-0.13	2.23
1,716.00	17.25	59.11	1,678.57	152.98	268.07	308.19	0.58	-0.20	-1.84
1,811.00	17.25	58.86	1,769.30	167.49	292.22	336.27	0.08	0.00	-0.26
1,907.00	18.00	58.99	1,860.79	182.49	317.11	365.25	0.78	0.78	0.14
2,002.00	17.88	61.11	1,951.17	197.10	342.46	394.45	0.70	-0.13	2.23
2,098.00	18.81	59.49	2,042.29	212.08	368.70	424.62	1.10	0.97	-1.69
2,192.00	17.56	60.11	2,131.60	226.84	394.05	453.90	1.35	-1.33	0.66
2,288.00	18.00	60.11	2,223.01	241.45	419.47	483.16	0.46	0.46	0.00
2,383.00	17.69	60.49	2,313.44	255.87	444.75	512.23	0.35	-0.33	0.40
2,478.00	16.75	57.99	2,404.18	270.24	468.92	540.27	1.26	-0.99	-2.63
2,574.00	16.69	59.24	2,496.12	284.62	492.50	567.79	0.38	-0.06	1.30
2,670.00	16.81	58.86	2,588.05	298.85	516.23	595.38	0.17	0.12	-0.40
2,775.00	16.82	60.30	2,688.56	314.23	542.42	625.68	0.40	0.01	1.37
2,936.00	16.95	57.59	2,842.62	338.35	582.47	672.29	0.50	0.08	-1.68
3,031.00	17.88	55.84	2,933.27	353.96	606.23	700.52	1.12	0.98	-1.84
3,125.00	18.56	58.34	3,022.56	369.92	630.90	729.73	1.10	0.72	2.66
3,219.00	20.88	61.72	3,111.04	385.71	658.39	761.38	2.75	2.47	3.60
3,313.00	20.06	61.22	3,199.10	401.41	687.27	794.23	0.89	-0.87	-0.53
3,407.00	21.50	62.84	3,286.99	417.03	716.73	827.57	1.65	1.53	1.72
3,502.00	20.88	61.97	3,375.56	432.94	747.16	861.90	0.73	-0.65	-0.92
3,597.00	21.06	63.72	3,464.27	448.45	777.41	895.89	0.69	0.19	1.84
3,692.00	20.81	63.09	3,553.00	463.64	807.77	929.84	0.35	-0.26	-0.66
3,787.00	21.13	59.97	3,641.71	479.85	837.64	963.80	1.22	0.34	-3.28
3,881.00	19.93	60.67	3,729.74	496.18	866.28	996.72	1.30	-1.28	0.74
3,976.00	18.75	62.22	3,819.38	511.23	893.90	1,028.16	1.35	-1.24	1.63
4,071.00	18.88	58.34	3,909.31	526.41	920.49	1,058.73	1.32	0.14	-4.08
4,165.00	20.13	57.97	3,997.91	542.97	947.15	1,089.98	1.34	1.33	-0.39
4,260.00	19.81	59.59	4,087.20	559.79	974.90	1,122.32	0.67	-0.34	1.71
4,356.00	18.19	61.84	4,177.97	575.10	1,002.14	1,153.53	1.85	-1.69	2.34
4,450.00	16.69	63.34	4,267.64	588.08	1,027.14	1,181.70	1.67	-1.60	1.60
4,545.00	17.25	54.34	4,358.52	602.42	1,050.78	1,209.25	2.82	0.59	-9.47
4,640.00	18.13	55.97	4,449.03	618.90	1,074.47	1,237.82	1.06	0.93	1.72
4,735.00	20.38	57.47	4,538.71	636.07	1,100.67	1,268.93	2.42	2.37	1.58
4,830.00	19.38	60.34	4,628.05	652.76	1,128.32	1,301.12	1.47	-1.05	3.02
4,924.00	20.63	60.47	4,716.38	668.65	1,156.28	1,333.23	1.33	1.33	0.14
5,018.00	21.56	59.59	4,804.08	685.55	1,185.58	1,367.00	1.05	0.99	-0.94
5,113.00	22.27	63.59	4,892.22	702.39	1,216.76	1,402.42	1.74	0.75	4.21
5,207.00	21.25	61.84	4,979.52	718.36	1,247.73	1,437.26	1.29	-1.09	-1.86
5,301.00	17.94	56.09	5,068.07	734.48	1,274.78	1,468.66	4.07	-3.52	-6.12
5,396.00	17.25	59.72	5,158.63	749.74	1,299.08	1,497.23	1.36	-0.73	3.82
5,491.00	17.06	60.59	5,249.40	763.69	1,323.39	1,525.20	0.34	-0.20	0.92
5,586.00	15.69	61.22	5,340.55	776.72	1,346.79	1,551.96	1.45	-1.44	0.66
5,681.00	13.75	56.22	5,432.43	789.18	1,367.43	1,576.00	2.44	-2.04	-5.26
5,775.00	12.13	58.09	5,524.04	800.61	1,385.10	1,596.92	1.78	-1.72	1.99
5,870.00	9.81	55.47	5,617.30	810.48	1,400.24	1,614.87	2.50	-2.44	-2.76
5,965.00	7.50	56.97	5,711.21	818.45	1,412.11	1,629.05	2.44	-2.43	1.58
6,058.00	5.50	60.34	5,803.61	823.96	1,421.07	1,639.53	2.19	-2.15	3.62
6,153.00	5.25	63.22	5,898.19	828.17	1,428.91	1,648.43	0.39	-0.26	3.03
6,248.00	4.31	56.22	5,992.86	832.11	1,435.76	1,656.31	1.16	-0.99	-7.37
6,343.00	2.25	58.09	6,087.70	835.09	1,440.31	1,661.71	2.17	-2.17	1.97

RECEIVED

**Company:** ANADARKO PETROLEUM CORP.  
**Project:** UINTAH COUNTY, UTAH (nad 27)  
**Site:** NBU 922-18E PAD  
**Well:** NBU 922-18C4CS  
**Wellbore:** NBU 922-18C4CS  
**Design:** NBU 922-18C4CS

**Local Co-ordinate Reference:** Well NBU 922-18C4CS  
**TVD Reference:** WELL @ 4920.00ft (Original Well Elev)  
**MD Reference:** WELL @ 4920.00ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

**Survey**

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,438.00	0.38	115.84	6,182.67	835.93	1,442.18	1,663.76	2.18	-1.97	60.79
6,533.00	0.63	142.97	6,277.67	835.38	1,442.77	1,664.05	0.36	0.26	28.56
6,628.00	0.19	6.09	6,372.66	835.12	1,443.10	1,664.23	0.82	-0.46	-144.08
6,722.00	0.19	98.22	6,466.66	835.25	1,443.28	1,664.44	0.29	0.00	98.01
6,817.00	0.38	114.34	6,561.66	835.10	1,443.72	1,664.77	0.22	0.20	16.97
6,912.00	0.44	157.97	6,656.66	834.63	1,444.14	1,664.94	0.33	0.06	45.93
7,007.00	0.69	154.59	6,751.66	833.78	1,444.52	1,664.90	0.27	0.26	-3.56
7,102.00	0.38	348.09	6,846.65	833.57	1,444.70	1,664.97	1.12	-0.33	-175.26
7,197.00	0.13	258.84	6,941.65	833.86	1,444.53	1,664.94	0.42	-0.26	-93.95
7,292.00	0.06	254.84	7,036.65	833.82	1,444.38	1,664.79	0.07	-0.07	-4.21
7,386.00	0.13	153.59	7,130.65	833.71	1,444.38	1,664.74	0.16	0.07	-107.71
7,481.00	0.50	154.09	7,225.65	833.24	1,444.61	1,664.74	0.39	0.39	0.53
7,576.00	0.94	119.34	7,320.64	832.49	1,445.47	1,665.17	0.63	0.46	-36.58
7,671.00	0.81	164.34	7,415.63	831.46	1,446.33	1,665.48	0.72	-0.14	47.37
7,765.00	0.56	173.09	7,509.63	830.36	1,446.56	1,665.20	0.29	-0.27	9.31
7,859.00	0.44	327.22	7,603.63	830.21	1,446.42	1,665.00	1.04	-0.13	163.97
7,954.00	0.31	279.09	7,698.62	830.56	1,445.97	1,664.76	0.35	-0.14	-50.66
8,049.00	0.88	272.84	7,793.62	830.64	1,444.99	1,663.91	0.60	0.60	-6.58
8,143.00	0.13	320.72	7,887.61	830.75	1,444.20	1,663.26	0.85	-0.80	50.94
8,237.00	0.13	225.34	7,981.61	830.76	1,444.06	1,663.13	0.20	0.00	-101.47
8,331.00	0.31	197.97	8,075.61	830.45	1,443.90	1,662.85	0.22	0.19	-29.12
8,426.00	0.50	189.59	8,170.61	829.79	1,443.76	1,662.43	0.21	0.20	-8.82
8,521.00	0.69	190.97	8,265.61	828.82	1,443.58	1,661.84	0.20	0.20	1.45
8,615.00	0.44	155.72	8,359.60	827.94	1,443.62	1,661.48	0.44	-0.27	-37.50
8,710.00	0.88	195.47	8,454.60	826.90	1,443.57	1,660.97	0.64	0.46	41.84
8,805.00	0.94	136.09	8,549.59	825.64	1,443.92	1,660.72	0.95	0.06	-62.51
8,900.00	0.56	116.22	8,644.58	824.87	1,444.88	1,661.23	0.48	-0.40	-20.92
8,995.00	1.00	161.22	8,739.57	823.88	1,445.56	1,661.40	0.76	0.46	47.37
9,090.00	1.13	164.84	8,834.55	822.19	1,446.07	1,661.10	0.15	0.14	3.81
9,185.00	0.81	164.84	8,929.54	820.64	1,446.49	1,660.78	0.34	-0.34	0.00
9,281.00	0.69	162.09	9,025.53	819.43	1,446.85	1,660.56	0.13	-0.12	-2.86
9,313.00	0.81	162.97	9,057.53	819.03	1,446.97	1,660.50	0.38	0.37	2.75
9,376.00	0.11	216.70	9,120.53	818.56	1,447.07	1,660.37	1.19	-1.11	85.29
9,471.00	0.18	97.07	9,215.53	818.47	1,447.16	1,660.41	0.27	0.07	-125.93
9,565.00	0.25	23.59	9,309.53	818.64	1,447.39	1,660.69	0.28	0.07	-78.17
9,660.00	0.31	62.84	9,404.52	818.95	1,447.70	1,661.11	0.21	0.06	41.32
9,754.00	0.69	112.22	9,498.52	818.85	1,448.45	1,661.73	0.58	0.40	52.53
9,848.00	0.69	105.22	9,592.51	818.49	1,449.52	1,662.53	0.09	0.00	-7.45
9,942.00	0.81	110.34	9,686.51	818.11	1,450.69	1,663.41	0.15	0.13	5.45
10,037.00	0.94	109.34	9,781.49	817.61	1,452.06	1,664.41	0.14	0.14	-1.05
10,130.00	1.06	140.09	9,874.48	816.70	1,453.33	1,665.14	0.58	0.13	33.06
EXT.TD									
10,180.00	1.06	140.09	9,924.47	815.99	1,453.92	1,665.35	0.00	0.00	0.00

**Survey Annotations**

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
10,180.00	9,924.47	815.99	1,453.92	EXT.TD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ **RECEIVED** Date: \_\_\_\_\_

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )	Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD	Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009
Active Datum: RKB @4,920.00ft (above Mean Sea Level)	UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
6/17/2009	7:00 - 11:30	4.50	MIRU	01	A	P		MIRU
	11:30 - 15:00	3.50	MIRU	01	B	P		RURT
	15:00 - 17:00	2.00	PRPSPD	06	A	P		P/U BIT #1,MUD MTR,,DIR TOOLS
	17:00 - 0:00	7.00	DRLSUR	02	D	P		DIR DRILL F,40 TO 490',SURVEY EVERY 90,
6/18/2009	0:00 - 14:30	14.50	DRLSUR	02	D	P		DIR DRILL 490' TO 1390 ,SURVEY 90',
	14:30 - 15:00	0.50	DRLSUR	07	A	P		RIG SERVICE
	15:00 - 0:00	9.00	DRLSUR	02	D	P		DIR DRILL F/1390 TO ,SURVEY EVERY 90,
6/19/2009	0:00 - 14:30	14.50	DRLSUR	02	D	P		DIR DRILL F/1780 TO 2290 ,SURVEY EVERY 90'
	14:30 - 15:00	0.50	DRLSUR	07	A	P		RIG SERVICE
	15:00 - 16:00	1.00	DRLSUR	08	B	Z		WORK ON PUMPS
	16:00 - 0:00	8.00	DRLSUR	02	D	P		DIR DRILL F/2290 TO 2530 ,SURVEY EVERY 90
6/20/2009	0:00 - 11:30	11.50	DRLSUR	02	D	P		DIR DRILLF/1830 TO 2760 ,
	11:30 - 12:00	0.50	DRLSUR	07	A	P		RIG SERVICE
	12:00 - 15:00	3.00	DRLSUR	02	D			DIR DRILL F/2760 TO 2830,SURVEY=16.82AZ 60.3,
	15:00 - 16:00	1.00	DRLSUR	05	C	P		20' HIGH & 3' LEFT
8/19/2009	16:00 - 19:00	3.00	CSG	06	D	P		CIRC ,CLEAN HOLE TO LDDP
	19:00 - 22:00	3.00	CSG	12	C	P		LDDP & BHA F/CSG RUN
	22:00 - 0:00	2.00	CSG	12	E	P		RUN 65 JTS #40 J55 9.625 CSG TO 2812'
	9:00 - 9:30	0.50	RDMO	01	E	P		PUMP CEMENT ,RIG RELEASE@ 23:59 6/20/09
	9:30 - 10:00	0.50	RDMO	01	C	P		RIG DOWN EQUIPMENT TO SKID
	10:00 - 10:30	0.50	RDMO	01	B	P		SKID RIG F/ NBU 922-18C4BS - T/ NBU 922-18C4CS
	10:30 - 11:00	0.50	PRPSPD	14	A	P		RIG UP EQUIPMENT AFTER SKID
	11:00 - 16:00	5.00	PRPSPD	15	A	P		NIPPLE UP B.O.P.E.
								PRESSURE TEST PIPE RAMS, BLIND RAMS, IBOP, FLOOR VALVE, KILL LINES & KILL LINE VALVES, BOP WING VALVES , HCR VALVE + CHOKE LINE; INNER AND OUTER CHOKE VALVES & MANIFOLD TO 250 PSI LOW @ 5 MINUTES + 5000 PSI HIGH @ 10 MINUTES / TEST ANNULAR TO 250 PSI LOW @ 5 MINUTES + 2500 PSI HIGH @ 10 MINUTES / TEST SUPER CHOKE + SURFACE CASING TO 1500 PSI @ 30 MINUTES - FUNCTION TEST CLOSING UNIT - PASSED
	16:00 - 16:30	0.50	PRPSPD	07	A	P		SERVICE RIG & EQUIPMENT
	16:30 - 21:00	4.50	PRPSPD	06	A	P		MAKE UP & ORIENTATE M.W.D. TOOLS / PARTICAL & VISUAL INSPECTION ON H.W.D.P. WHILE T.I.H. / T.I.H. / INSTALL ROTATING RUBBER / TAD CEMENT @ 2772' / PRESSURE TEST PUMPS, LINES & TOP DRIVE TO 2500 P.S.I.
	21:00 - 22:00	1.00	PRPSPD	02	F	P		BREAK CIRCULATION & DRILL FLOAT TRAC.
	22:00 - 0:00	2.00	PRPSPD	02	D	P		DRILL (ROTATE & SLIDE) F/ 2830" - T/ 2986' = 156' @ 78.0 FPH / WOB 10/14 / RPM TOP DRV 30-35 / MTR 99 RPM / PUMP SPM 100 = 450 GPM / SPP ON/OFF 1650/1400 / TQ ON/OFF 6K-3K / PU/SO/ROT 110/85/96 / H2O + POLY / SLIDE 10' IN .42 HRS = 6.4% OF FOOTAGE DRILLED & 21% OF HOURS DRILLED

**RECEIVED**

**DEC 21 2009**

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009		Spud Date: 6/17/2009	
Project: UTAH-UINTAH		Site: NBU 922-18E PAD		Rig Name No: ELENBURG 12/12, H&P 298/298	
Event: DRILLING		Start Date: 6/16/2009		End Date: 8/28/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0			

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/20/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL F/ 2971' - T/ 3482' = 511' @ 85.16 FPH / H2O + POLYMER / WOB 14K-17K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 1725/1450 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 119/95/105 / TORQUE ON/OFF BOTTOM 7K/3K / SLIDE 112' IN 2.69 HRS = 21.9% OF FOOTAGE DRILLED & 44.8% OF HOURS DRILLED
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILL F/ 3482' - T/ 4406' = 924' @ 80.3 FPH / H2O + POLYMER / WOB 18K-19K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 1960/1586 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 150/96/113 / TORQUE ON/OFF BOTTOM 6K/4K / SLIDE 248' IN 5.34 HRS = 26.8% OF FOOTAGE DRILLED & 46.4% OF HOURS DRILLED
	17:30 - 18:00	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL F/ 4406' - T/ 4750' = 344' @ 57.3 FPH / H2O + POLYMER / WOB 18K-19K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 1900/1585 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 150/102/121 / TORQUE ON/OFF BOTTOM 9K/5K / SLIDE 166' IN 3.09 HRS = 48.2% OF FOOTAGE DRILLED & 51.5% OF HOURS DRILLED
8/21/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 4750' - T/ 5048' = 298' @ 49.6 FPH / H2O + POLYMER / WOB 18K-19K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 1935/1610 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 160/100/126 / TORQUE ON/OFF BOTTOM 11K/6K / SLIDE 192' IN 4.0 HRS = 64.4% OF FOOTAGE DRILLED & 66.6% OF HOURS DRILLED
	6:00 - 17:00	11.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 5048' - T/ 5825' = 777' @ 70.63 FPH / H2O + POLYMER / WOB 18K-20K / TOP DRIVE RPM 35-40 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2060/1660 PSI / MUD MOTOR RPM 99 / PU/SO/ROT WT 165/110/135 / TORQUE ON/OFF BOTTOM 10K/7K / SLIDE 173' IN 4.0 HRS = 22.2% OF FOOTAGE DRILLED & 36.3% OF HOURS DRILLED
	17:00 - 17:30	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	17:30 - 0:00	6.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 5825' - T/ 6391' = 566' @ 87.01 FPH / H2O + POLYMER / WOB 18K-20K / TOP DRIVE RPM 35-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2450/2100 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT 200/111/146 / TORQUE ON/OFF BOTTOM 13K/9K / SLIDE 62' IN 2.67 HRS = 10.9% OF FOOTAGE DRILLED & 41.0% OF HOURS DRILLED

**RECEIVED**

**DEC 21 2009**

**DIV. OF OIL, GAS & MINING**



**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/O/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/22/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 6391' - T/ 6931' = 540' @ 90.0 FPH / H2O + POLYMER / WOB 18K-20K / TOP DRIVE RPM 35-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2450/2100 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT 220/115/153 / TORQUE ON/OFF BOTTOM 13K/10K / SLIDE 28' IN .75 HRS = 5.1% OF FOOTAGE DRILLED & 12.5% OF HOURS DRILLED
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 6931' - T/ 7532' = 601' @ 52.2 FPH / WOB 18K-20K / TOP DRIVE RPM 35-40 / PUMP 110 SPM = 495 GPM / PUMP PRESSURE ON/OFF BOTTOM 2300/2075 PSI / MUD MOTOR RPM 109 / PU/SO/ROT WT 230/120/162 / TORQUE ON/OFF BOTTOM 14K/12K / SLIDE 40' IN 1.5 HRS = 6.6% OF FOOTAGE DRILLED & 13% OF HOURS DRILLED / START LITE MUD UP @ 7000' / ADDING WHOLE MUD FROM ON LOCATION STORAGE / 33 VIS - 9.3 PPG
	17:30 - 18:00	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 7532' - T/ 7735' = 230' @ 33.8 FPH / WOB 18K-21K / TOP DRIVE RPM 35-40 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2250/2000 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 240/126/166 / TORQUE ON/OFF BOTTOM 14K/12K / SLIDE 34' IN 1.25 HRS = 14.7% OF FOOTAGE DRILLED & 20.8% OF HOURS DRILLED / 36 VIS - 9.6 PPG
8/23/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 7735' - T/ 7945' = 210' @ 35.0 FPH / WOB 20K-23K / TOP DRIVE RPM 35-40 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2330/2050 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 248/126/168 / TORQUE ON/OFF BOTTOM 14K/12K / SLIDE 28' IN 1.0 HRS = 13.3% OF FOOTAGE DRILLED & 16.6% OF HOURS DRILLED / 34 VIS - 9.8 PPG / WEIGHT RAISED TO CONTROL SHALE
	6:00 - 17:30	11.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 7945' - T/ 8370' = 425' @ 36.9 FPH / WOB 19K-21K / TOP DRIVE RPM 30-35 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2430/2236 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 250/134/170 / TORQUE ON/OFF BOTTOM 16K/14K / SLIDE 40' IN 1.75 HRS = 9.4% OF FOOTAGE DRILLED & 15.2% OF HOURS DRILLED / 40 VIS - 10.5 PPG
	17:30 - 18:00	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:00 - 0:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 8370' - T/ 8590' = 220' @ 36.6 FPH / WOB 19K-21K / TOP DRIVE RPM 35-45 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2570/2300 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 245/130/174 / TORQUE ON/OFF BOTTOM 15K/14K / SLIDE 59' IN 2.5 HRS = 26.8% OF FOOTAGE DRILLED & 41.6% OF HOURS DRILLED / 40 VIS - 10.5 PPG

**RECEIVED**

**DEC 21 2009**

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )	Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD	Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/24/2009	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 8590' - T/ 8774' = 184' @ 30.66 FPH / WOB 19K-21K / TOP DRIVE RPM 35-45 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2575/2310 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 248/131/175 / TORQUE ON/OFF BOTTOM 15K/13K / SLIDE 17' IN .83 HRS = 9.2% OF FOOTAGE DRILLED & 13.8% OF HOURS DRILLED / 43 VIS - 10.5 PPG
	6:00 - 18:00	12.00	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 8774' - T/ 9128' = 354' @ 29.5 FPH / WOB 19K-21K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2778/2545 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 258/140/180 / TORQUE ON/OFF BOTTOM 16K/14K / SLIDE 107' IN 4.5 HRS = 30.2% OF FOOTAGE DRILLED & 37.5% OF HOURS DRILLED / 44 VIS - 11.0 PPG / MUD WEIGHT RAISED TO CONTROL SHALE / HOLE TAKING FLUID - SWEEPS WOULD NOT HEAL - BYPASSED & ADDED 3% LCM TO ACTIVE SYSTEM
	18:00 - 18:30	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	18:30 - 0:00	5.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 9128' - T/ 9304' = 176' @ 32.0 FPH / WOB 19K-21K / TOP DRIVE RPM 30-40 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2825/2600 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 270/140/184 / TORQUE ON/OFF BOTTOM 16K/14K / SLIDE 26' IN 1.75 HRS = 14.7% OF FOOTAGE DRILLED & 31.8% OF HOURS DRILLED / 44 VIS - 11.4 PPG - 3% LCM / RAISED MUD WEIGHT TO 11.4 PPG TO CONTROL GAS & STABILIZE HOLE FOR BIT TRIP / LOST APPROXIMATELY 175 BBLS TO HOLE LAST 24 HOURS
8/25/2009	0:00 - 0:30	0.50	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9304' - T/ 9311' = 7' @ 14 FPH / WOB 19K-22K / TOP DRIVE RPM 35-45 / PUMP 105 SPM = 473 GPM / PUMP PRESSURE ON/OFF BOTTOM 2825/2600 PSI / MUD MOTOR RPM 104 / PU/SO/ROT WT 270/140/184 / TORQUE ON/OFF BOTTOM 16K/14K / 100% OF FOOTAGE ROTATED / 44 VIS - 11.4 PPG / RAISE MUD WEIGHT TO CONTROL GAS & STABILIZE HOLE FOR BIT TRIP
	0:30 - 5:30	5.00	DRLPRO	06	A	P		P.O.O.H. @ 9311' W/ BIT #1 (PULL 4 STANDS - PUMP SLUG) / PULL ROTATING RUBBER @ B.H.A.
	5:30 - 6:30	1.00	DRLPRO	06	A	P		LAY DOWN M.W.D. TOOLS / BREAK BIT / LAY DOWN MOTOR / WORK BLIND & PIPE RAMS
	6:30 - 7:30	1.00	DRLPRO	06	A	P		MAKE UP MOTOR & BIT / INSTALL M.W.D. TOOLS & OREIANTATE MOTOR / SHALLOW TEST M.W.D. TOOLS
	7:30 - 11:30	4.00	DRLPRO	06	A	P		T.I.H. W/ BIT #2 / INSTALL ROTATING RUBBER / BREAK CIRCULATION AT SELECTED INTERVALS /
	11:30 - 12:00	0.50	DRLPRO	03	D	P		PRECAUTIONARY REAM F/ 9142' - T/ 9311' / CUT BIT PATTERN & SOFT START BIT / LOST APPROXIMATELY 44 BBLS MUD ON TRIP

**RECEIVED**  
**DEC 21 2009**

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
8/26/2009	12:00 - 15:30	3.50	DRLPRO	02	D	P		DRILL (ROTATE/SLIDE) F/ 9311' - T/ 9426' = 115' @ 32.8 FPH / WOB 19K-22K / TOP DRIVE RPM 35-45 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2870/2700 PSI / MUD MOTOR RPM 72 / PU/SO/ROT WT 255/145/184 / TORQUE ON/OFF BOTTOM 16K/15K / SLIDE 20' IN 1.5 HOURS = 17.3% OF FOOTAGE & 42.8% OF TIME DRILLED / 43 VIS - 11.5 PPG - 4% LCM / HOLE SEEPING - RAISING L.C.M. TO 5% / LOST APPROXIMATELY 38 BBLS
	15:30 - 16:00	0.50	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / VISUAL INSPECTION ON B.O.P.E.
	16:00 - 0:00	8.00	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9426' - T/ 9685' = 259' @ 32.3 FPH / WOB 19K-22K / TOP DRIVE RPM 30-40 / PUMP 95 SPM = 428 GPM / PUMP PRESSURE ON/OFF BOTTOM 2700/2550 PSI / MUD MOTOR RPM 68 / PU/SO/ROT WT 280/140/192 / TORQUE ON/OFF BOTTOM 16K/15K / 45 VIS - 11.6 PPG - 5% LCM / LOST APPROXIMATELY 15 BBLS / TOTAL LOSSES = 97 BBLS
	0:00 - 6:00	6.00	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9685' - T/ 9816' = 131' @ 21.8 FPH / WOB 18K-21K / TOP DRIVE RPM 30-40 / PUMP 90 SPM = 405 GPM / PUMP PRESSURE ON/OFF BOTTOM 2375/2200 PSI / MUD MOTOR RPM 65 / PU/SO/ROT WT 290/148/192 / TORQUE ON/OFF BOTTOM 16K/14K / 100% OF FOOTAGE ROTATED / 44 VIS - 11.5 PPG - 5% LCM
	6:00 - 12:30	6.50	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9816' - T/ 9992' = 176' @ 27.1 FPH / WOB 18K-22K / TOP DRIVE RPM 30-45 / PUMP 88 SPM = 396 GPM / PUMP PRESSURE ON/OFF BOTTOM 2150/1975 PSI / MUD MOTOR RPM 63 / PU/SO/ROT WT 293/159/196 / TORQUE ON/OFF BOTTOM 14K/13K / 100% OF FOOTAGE ROTATED / 44 VIS - 11.7 PPG - 5% LCM
	12:30 - 21:30	9.00	DRLPRO	02	D	P		DRILL (ROTATE) F/ 9992' - T/ 10180' (T.D.) = 188' @ 20.8 FPH / WOB 18K-23K / TOP DRIVE RPM 30-45 / PUMP 100 SPM = 450 GPM / PUMP PRESSURE ON/OFF BOTTOM 2450/2300 PSI / MUD MOTOR RPM 72 / PU/SO/ROT WT 295/160/200 / TORQUE ON/OFF BOTTOM 16K/15K / 100% OF FOOTAGE ROTATED / 44 VIS - 11.8 PPG - 5% LCM / TOTAL LOSSES 24 HOURS = 45 BBLS
	12:30 - 12:30	0.00	DRLPRO	07	A	P		SERVICE RIG & EQUIPMENT / WORK PIPE RAMS / VISUAL INSPECTION ON B.O.P.E.
	21:30 - 22:30	1.00	DRLPRO	05	C	P		CIRCULATE & CONDITION HOLE FOR SHORT TRIP / ROTATE & RECIPROCATATE PIPE 90'
	22:30 - 0:00	1.50	DRLPRO	06	E	P		SHORT TRIP TO 2800' (ROTATE & PUMP OUT F/ 10180' - T/ 9520' - STRAIGHT PULL F/ 9520' - T/ 9145') / PUMP PILL / P.O.O.H.
	0:00 - 2:00	2.00	EVALPR	06	E	P		SHORT TRIP (ROTATE & PUMP OUT F/ 10180' - T/ 9520' - STRAIGHT PULL F/ 9520' - T/ 9145') / PUMP PILL / P.O.O.H. TO 2800'
8/27/2009	2:00 - 5:00	3.00	EVALPR	06	E	P		SHORT TRIP / T.I.H. - WASH THRU BRIDGE @ 7255' / T.I.H. / BREAKING CIRCULATION AT SELECTED INTERVALS
	5:00 - 5:30	0.50	EVALPR	03	D	P		PRECAUTIONARY REAM F/ 9992' - T/ 10180' W/ 4' FILL ON BOTTOM
	5:30 - 7:30	2.00	EVALPR	05	C	P		CIRCULATE & CONDITION HOLE FOR LOGS / SWEEP HOLE W/ HIGH VIS SWEEPS / LOST APPROX. 3 BBLS MUD TO HOLE / SPOT 50 VIS MUD IN HOLE

**RECEIVED**

**DEC 21 2009**

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 13:00	5.50	EVALPR	06	B	P		P.O.O.H. FOR LOGS / PUMP/ROTAT OUT F/ 10180' - T/ 9041 / PUMP PILL / P.O.O.H. / LAY DOWN M.W.D. TOOLS / BREAK BIT & STAND BACK MOTOR + RELATED TOOLS
	13:00 - 15:30	2.50	EVALPR	11	D	P		SAFETY MEETING / M.I.R.U. HALLIBURTON LOGGING EQUIPMENT / R.I.H. - LOGS BRIDGED @ 8114' - UNABLE TO WORK THRU / ATTEMPT TO LOG UP - TOOLS FAILED / P.O.O.H. - SWAP OUT TOOLS - REMOVE BOW SPRING & FLEX JOINT / R.I.H.
	15:30 - 16:30	1.00	EVALPR	11	D	Z		ATTEMPT TO LOG UP - TOOLS FAILED / P.O.O.H. - SWAP OUT TOOLS - REMOVE BOW SPRING & FLEX JOINT / HALLIBURTON REDUCED TICKET BY \$1041.00 FOR 1 HOUR OF RIG TIME
	16:30 - 20:30	4.00	EVALPR	11	D	P		R.I.H. - HIT BRIDGE @ 8110' / COULD NOT WORK THROUGH / LOG UP W/ TRIPLE COMBO TOOLS F/ 8110' - T / SURFACE (2832') / R.D.M.O. HALLIBURTON EQUIPMENT
	20:30 - 21:00	0.50	CSG	14	B	P		PULL WEAR BUSHING / VISUAL INSPECTION ON B.O.P.E. / WORK PIPE & BLIND RAMS
	21:00 - 22:00	1.00	CSG	12	A	P		SAFETY MEETING / M.I.R.U. WEATHERFORD EQUIPMENT / INSPECT EQUIPMENT FOR PROPER RIG UP
	22:00 - 0:00	2.00	CSG	12	C	P		RUN 8 JTS P-110 #11.6 LT&C 4.5 CASING + 1 XO JT I-80 11.6# FROM LTC TO BTC,234 JTS I-80 #11.6 BTC 4.5 CASING + RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS
8/28/2009	0:00 - 6:00	6.00	CSG	12	C	P		FINISH RUN 8 JTS P-110 #11.6 LT&C 4.5 CASING + 1 XO JT I-80 11.6# FROM LTC TO BTC,234 JTS I-80 #11.6 BTC 4.5 CASING + RELATED TOOLS / BREAKING CIRCULATION @ SELECTED INTERVALS / PUSHED THROUGH BRIDGE @ 8110' W/ 40K / INSTALL SOLID MANDREL + ROTATING RUBBER / BREAK CIRCULATION / HOLD CASING @ 10169' WHILE CIRCULATING & CEMENTING
	6:00 - 7:30	1.50	CSG	05	D	P		CIRCULATE & CONDITION HOLE FOR CEMENT / R.D.M.O. CASING EQUIPMENT / SPOT B.J. CEMENTING EQUIPMENT / LOST FULL RETURNS 30 MINUTES INTO CIRCULATION / ADDED LCM TO MUD ON LOCATION & PUMPED APPROXIMATELY 420 BBLS WITH NO RETURNS / 48 VIS - 11.8 - 10% LCM

**RECEIVED**

**DEC 21 2009**

**DIV. OF OIL, GAS & MINING**

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No: ELENBURG 12/12, H&P 298/298
Event: DRILLING	Start Date: 6/16/2009	End Date: 8/28/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/O/SWNNW/6/PM/N/1,903.00/W/0/404.00/O/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 11:30	4.00	CSG	12		P		SAFETY MEETING (REVIEW J.S.A.) TEST PUMPS & LINES TO 4300 PSI / PUMP 40 BBLS H2O AT A RATE OF 8.6 BBP / PRESSURING UP TO 2000 PSI / PUMPED 20 MORE BBLS H2O W/ NO BREAK / STARTED + 625 SX LEAD CEMENT @ 11.8 ppg (PREM LITE II + .05lbs/sx STATIC FREE + .25 pps CELLOFLAKE + 5 pps KOL SEAL + 8% bwoc BENTONITE + .2% bwoc SODIUM METASILICATE + 203 BBLS H2O / (13.67 gal/sx, 2.42 yield) WITH NO CIRCULATION + 1278 SX TAIL @ 14.3 ppg (CLS G 50/50 POZ + 10% SALT + .05lbs/sx STATIC FREE + .2% R3 + .002 GPS FP-6L + 2% BENTONITE + 180BBLS H2O / (5.90 gal/sx, 1.31 yield) FULL RETURNS @ 60 BBLS TAIL PUMPED / DROP PLUG & DISPLACE W/ 158 BBLS H2O + ADDITIVES / LOST RETURNS 45 BBLS INTO DISPLACEMENT W/ PARTIAL RETURNS THROUGHOUT DISPLACEMENT / LIFT PRESSURE @ 2630 PSI (CALC TOP OF TAIL @ 3767') / BUMP PLUG W/ 3275 PSI - HOLD 5 MINUTES W/ NO LOSS / PLUG DOWN @ 11:00 HOURS W/ NO CEMENT TO SURFACE / FLOATS HELD W/ 2.0 BBLS BACK TO INVENTORY / R.D.M.O. CEMENT EQUIPMENT
	11:30 - 12:30	1.00	SUSPEN	14	A	P		LAND CASING W/ SHOE @ 10171' - TOP OF FLOAT COLLAR @ 10129' & TOP OF MARKER JOINT @ MARKER 5301' / LAY DOWN LANDING JOINT & ROTATING RUBBER
	12:30 - 13:00	0.50	CSG	14	A			NIPPLE DOWN B.O.P.E. / CLEAN PITS + RELATED EQUIPMENT / RELEASE RIG @ 13:00

**RECEIVED**  
**DEC 21 2009**  
DIV. OF OIL, GAS & MINING

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )			Spud Conductor: 5/29/2009			Spud Date: 6/17/2009		
Project: UTAH-UINTAH			Site: NBU 922-18E PAD				Rig Name No:	
Event: COMPLETION			Start Date: 11/9/2009				End Date: 11/23/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)			UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0					
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/9/2009	- 7:00 - 18:00	11.00	COMP	36	B	P		STG 1)PU 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH PER F/ 9872'-74', 4 SPF, 8 HOLES. 9742'-46', 4 SPF, 16 HOLES. 9682'-88', 3 SPF, 18 HOLES. POOH. WHP 480 PSI, BRK 3491 PSI @ 6.4 BPM. ISIP 2906 PSI, FG .73. PUMP 100 BBLS @ 49.6 BPM @ 5465 PSI = 100% HOLES OPEN. MP 6434 PSI, MR 49.9 BPM, AP 4936 PSI, AR 44.1 BPM, ISIP 2900 PSI, FG .73, NPI 6 PSI. PMP 1655 BBLS SW & 57,737 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 62,737 LBS,  STG 2)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 9654' P/U PERF F/ 9622'-24', 4 SPF, 8 HOLES. 9554'-58', 4 SPF, 16 HOLES. 9480'-86', 3 SPF, 18 HOLES. POOH. HSM. SIM OPS.
11/10/2009	7:00 - 7:15	0.25	COMP	48		P		



# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No:
Event: COMPLETION	Start Date: 11/9/2009	End Date: 11/23/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:15 - 17:00	9.75	COMP	36	B	P		<p>STG 2)WHP 2416 PSI, BRK 3437 PSI @ 6.4 BPM. ISIP 2890 PSI, FG .73. PUMP 100 BBLs @ 51.5 BPM @ 5443 PSI = 100% HOLES OPEN. MP 6465 PSI, MR 51.6 BPM, AP 4990 PSI, AR 43.9 BPM, ISIP 3056 PSI, FG .75, NPI 166 PSI. PMP 809 BBLs SW &amp; 24,719 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 29,719 LBS,</p> <p>STG 3)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 &amp; 120 DEG PHASING. RIH SET CBP @ 9436' P/U PERF F/ 9402'-06', 3 SPF, 12 HOLES. 9368'-70', 4 SPF, 8 HOLES. 9196'-04', 3 SPF, 24 HOLES. POOH. WHP 2006 PSI, BRK 2429 PSI @ 6.4 BPM. ISIP 2333 PSI, FG .68. PUMP 100 BBLs @ 50.5 BPM @ 4331 PSI = 100% HOLES OPEN. MP 5534 PSI, MR 50.8 BPM, AP 4236 PSI, AR 48.2 BPM, ISIP 2420 PSI, FG .68, NPI 87 PSI. PMP 2767 BBLs SW &amp; 110,661 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 115,661 LBS, SWI.</p> <p>STG 4)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 9094' P/U PERF F/ 9060'-64', 4 SPF, 16 HOLES. 9018'-24', 4 SPF, 24 HOLES. POOH WHP 2100 PSI, BRK 3745 PSI @ 6.4 BPM. ISIP 2615 PSI, FG .72. PUMP 100 BBLs @ 50.5 BPM @ 5000 PSI = 100% HOLES OPEN. MP 5681 PSI, MR 50.7 BPM, AP 4423 PSI, AR 43.7 BPM, ISIP 2645 PSI, FG .72, NPI 30 PSI. PMP 814 BBLs SW &amp; 24,733 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 29,733 LBS,</p> <p>STG 5)PU 4 1/2 8K HAL CBP &amp; 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8688' P/U PERF F/ 8652'-58', 4 SPF, 24 HOLES. 8594'-98', 4 SPF, 16 HOLES. POOH. WHP 875 PSI, BRK 3734 PSI @ 6.4 BPM. ISIP 2060 PSI, FG .67. PUMP 100 BBLs @ 50.5 BPM @ 4700 PSI = 90% HOLES OPEN. MP 5465 PSI, MR 50.8 BPM, AP 4203 PSI, AR 46.5 BPM, ISIP 2674 PSI, FG .74, NPI 614 PSI. PMP 1346 BBLs SW &amp; 49,898 LBS OF 30/50 SND &amp; 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 54,898 LBS,</p>

# US ROCKIES REGION

## Operation Summary Report

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No:
Event: COMPLETION	Start Date: 11/9/2009	End Date: 11/23/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
11/11/2009	7:00 - 17:00	10.00	COMP	36	B	P		STG 6)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 8358' P/U PERF F/ 8326'-28', 4 SPF, 8 HOLES. 8288'-92', 3 SPF, 12 HOLES. 8234'-40', 3 SPF, 18 HOLES. POOH. SWI, SDFN.
								STG 6)WHP 951 PSI, BRK 3224 PSI @ 6.4 BPM. ISIP 1817 PSI, FG .65. PUMP 100 BBLS @ 00.0 BPM @ 0000 PSI = 00% HOLES OPEN. MP 5431 PSI, MR 51.6 BPM, AP 4138 PSI, AR 46.4 BPM, ISIP 2505 PSI, FG .73, NPI 688 PSI. PMP 845 BBLS SW & 27,293 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 32,293 LBS,
11/16/2009	6:45 - 7:00 7:00 - 15:30	0.25 8.50	COMP	48 31		P I		STG 7)PU 4 1/2 8K HAL CBP & 3 3/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8112' P/U PERF F/ 8076'-82', 3 SPF, 18 HOLES. 8060'-62', 3 SPF, 6 HOLES. 8008'-14', 3 SPF, 18 HOLES. POOH. WHP 1120 PSI, BRK 2619 PSI @ 6.4 BPM. ISIP 1307 PSI, FG .59. PUMP 100 BBLS @ 50.5 BPM @ 4300 PSI = 67% HOLES OPEN. MP 4824 PSI, MR 51.2 BPM, AP 4119 PSI, AR 47.9 BPM, ISIP 2820 PSI, FG .78, NPI 1513 PSI. PMP 1643 BBLS SW & 63,875 LBS OF 30/50 SND & 5,000 LBS OF 20/40 RESIN SND. TOTAL PROP 68,875 LBS,
								PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 7958'. POOH.N SWI. JSA- RDSU/ RUSU. PU TBG. RDSU FROM 18F1CS. MOVE OVER AND RUSU ON 18C4CS. ND FRAC VALVES. NU BOP. RU FLOOR AND TBG EQUIP. SPOT IN TBG. MU 3-7/8" HURRICANE MILL, POBS, 1.87" XN NIPPLE AND RIH AS MEAS AND PU 251 JTS 2-3/8" L-80 TBG. TAG SAND AT 7933'. RU DRLG EQUIP W/ #251. FLUSH LINES. DRAIN EQUIP. SDFN W/ EOT AT 7905'.
11/17/2009	6:45 - 7:00	0.25	COMP	48		P		JSA- D/O PLUGS. PUMP AND COLD WEATHER.

**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )		Spud Conductor: 5/29/2009	Spud Date: 6/17/2009
Project: UTAH-UINTAH	Site: NBU 922-18E PAD		Rig Name No:
Event: COMPLETION	Start Date: 11/9/2009	End Date: 11/23/2009	
Active Datum: RKB @4,920.00ft (above Mean Sea Level)		UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:00 - 18:00	11.00	COMP	44	C	P		<p>OPEN WELL AND WARM EQUIP. (1-FROZEN LINE) FILL HOLE AND P-TEST TO 3000 PSI. GOOD. EST CIRC AND D/O PLUGS.</p> <p>#1- C/O 14' SAND TO CBP AT 7958'. D/O PLUG IN 8 MIN. 100# INC. RIH.</p> <p>#2- C/O 5' SAND TO CBP AT 8112'. D/O PLUG IN 6 MIN. 150# INC. RIH.</p> <p>#3- C/O 37' SAND TO CBP AT 8358'. D/O PLUG IN 30 MIN. 50# INC. RIH.</p> <p>#4- C/O 38' SAND TO CBP AT 8688'. D/O PLUG IN 38 MIN. 50# INC. RIH.</p> <p>#5- C/O 33' SAND TO CBP AT 9094'. D/O PLUG IN 15 MIN. 50# INC. RIH.</p> <p>#6- C/O 30' SAND TO CBP AT 9436'. D/O PLUG IN 45 MIN. 250# INC.</p> <p>PLUG PUSHED UP 20K. LET PLUG EQUALIZE TO GET MOVING DOWN. RIH.</p> <p>SUSPECTING PROBLEMS WITH PWR SWIVEL. SWAP OUT PWR SWIVELS. NOT PWR SWIVEL. HOLE IS VERY DEVIATED. HAVE TORQUE TURNED UP TO 2100 FT LBS AND CAN ONLY ROTATE WHEN TBG IS MOVING UP OR DOWN. RIH.</p> <p>#7- C/O 32' SAND TO CBP AT 9654'. D/O PLUG IN 60 MIN. 300# INC.</p> <p>PLUG PUSHED UP 30K. LET PLUG EQUALIZE. ABLE TO GET JT DOWN. DRAIN EQUIP AND LINES. HOOK UP WELL TO FLOW ON 48/64 CHOKE. SDFN</p>
11/19/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2500#, TP 1475#, 20/64" CK, 42 BWPH, LIGHT SAND, LIGHT GAS</p> <p>TTL BBLS RECOVERED: 5075</p> <p>BBLS LEFT TO RECOVER: 4804</p>
11/20/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2525#, TP 1500#, 20/64" CK, 36 BWPH, LIGHT SAND, MEDIUM GAS</p> <p>TTL BBLS RECOVERED: 6005</p> <p>BBLS LEFT TO RECOVER: 3874</p>
	10:00 -		PROD	50				<p>WELL TURNED TO SALE @ 1000 HR ON 11/20/09</p> <p>- FTP 1550#, CP 2575#, 1.3 MCFD, 36 BWPD, 20/64 CK</p>
11/21/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2450#, TP 1525#, 20/64" CK, 30 BWPH, LIGHT SAND, - GAS</p> <p>TTL BBLS RECOVERED: 6783</p> <p>BBLS LEFT TO RECOVER: 3096</p>
11/22/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2600#, TP 1725#, 20/64" CK, 20 BWPH, LIGHT SAND, - GAS</p> <p>TTL BBLS RECOVERED: 7351</p> <p>BBLS LEFT TO RECOVER: 2528</p>
11/23/2009	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2550#, TP 1675#, 20/64" CK, 16 BWPH, TRACE SAND, - GAS</p> <p>TTL BBLS RECOVERED: 7787</p> <p>BBLS LEFT TO RECOVER: 2092</p>
	7:00 -			33	A			<p>7 AM FLBK REPORT: CP 2700#, TP 1750#, 20/64" CK, 16 BWPH, TRACE SAND, - GAS</p> <p>TTL BBLS RECOVERED: 7851</p> <p>BBLS LEFT TO RECOVER: 2028</p>
11/27/2009	7:00 -		PROD	50				<p>WELL IP'D 11/27/09 - 1792 MCFD, 0 BOPD, 75 BWPD, CP 2068#, FTP 1290#, CK 20/64", LP 128#, 24 HRS</p>

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359			
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE			
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES			
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 922-18C4CS			
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1903 FNL 0404 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 18 Township: 09.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047398450000			
<b>PHONE NUMBER:</b> 720 929-6515 Ext		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES			
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH			
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>					
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>				
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 6/28/2011  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input checked="" type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input checked="" type="checkbox"/> <b>CASING REPAIR</b>  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION            OTHER: <span style="border: 1px solid black; padding: 2px;">Wellhead Repair</span> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input checked="" type="checkbox"/> <b>CASING REPAIR</b> <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <span style="border: 1px solid black; padding: 2px;">Wellhead Repair</span>
<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input checked="" type="checkbox"/> <b>CASING REPAIR</b> <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <span style="border: 1px solid black; padding: 2px;">Wellhead Repair</span>			
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>  The operator requests approval to conduct wellhead/casing repair operations on the subject well location. Please find the attached procedure for the proposed repair work on the subject well location.					
<b>Accepted by the          Utah Division of          Oil, Gas and Mining</b>  <b>Date:</b> 07/11/2011 <b>By:</b>					
<b>NAME (PLEASE PRINT)</b> Gina Becker		<b>PHONE NUMBER</b> 720 929-6086			
<b>SIGNATURE</b> N/A		<b>TITLE</b> Regulatory Analyst II			
<b>DATE</b> 6/28/2011					

**WORKORDER #:**

**Name:** NBU 922-18C4CS - [922-18E PAD]  
**Surface Location:** SWNW Sec. 18, T9S, R22E  
 Uintah County, UT

6/16/2011

**API:** 4304739845      **LEASE#:** UTU-461

**ELEVATIONS:** 4894' GL      4920' KB

**TOTAL DEPTH:** 10,180'      **PBTD:** 10,130'

**SURFACE CASING:** 9 5/8", 40# J-55 @ 2829'

**PRODUCTION CASING:** 4 1/2", 11.6#, I-80 @ 10,170'  
 TOC @ ~1926' per CBL

**PERFORATIONS:** Mesaverde 8008' - 9874'

Tubular/Borehole	Drift inches	Collapse psi	Burst psi	Capacities		
				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbq.	1.901	8100	7700	0.1624	0.02171	0.00387
4.5" 11.6# I-80	3.875	6350	7780	0.6528	0.0872	0.0155
9.625" 40# J-55	8.679	2570	3950	3.1847	0.4257	0.0758
<b>Annular Capacities</b>						
2.375" tbq. X 4 1/2" 11.6# csg				0.4227	0.0565	0.01

**GEOLOGICAL TOPS:**

1834' Green River  
 2473' Mahogany  
 5339' Wasatch  
 8039' Mesaverde

## **NBU 922-18C4CS- WELLHEAD REPAIR PROCEDURE**

### **PREP-WORK PRIOR TO MIRU:**

1. Dig out down to the 2" surface casing valve or to the valve on the riser off the surface casing.
2. Install a tee with 2 valves, with a pressure gauge and sensor on one valve.
3. Open casing valve and record pressures.
4. Install nipple and steel hose on the other valve, the relief valve,. Do not use hammer unions. No impact equipment or tools to be used for any of this installation. Extend hose and hard piping to a downwind location at least 100' from the wellhead. Consider installing a manifold so that vent area could be in two locations approx. 90 degrees apart from the wellhead.
5. Open the relief valve and blow well down to the atmosphere.
6. Make a determination of amount of gas flow, either by installation of a choke nipple, bucket test or other.
7. Shut well in. Observe for rate of build-up by utilizing sensor data. Do not build-up for more than 24 hours. Vent gas through the vent line and leave open to the atmosphere.

### **WORKOVER PROCEDURE:**

1. MIRU workover rig.
2. Kill well with 10# brine / KCL (dictated by well pressure ).
3. Remove tree, install double BOP with blind and 2 3/8" pipe rams, with accumulator closing unit and manual back-ups. Function test BOP system.
4. POOH w/ tubing laying down extra tubing.
5. Rig up wireline service. RIH and set CBP @ ~7958'. Dump bail 4 sx cement on top of plug. POOH and RD wireline service. TIH w/ tubing and seating nipple. Land tubing ±60' above cement. RDMO.
6. Monitor well pressures. If surface casing is dead. MIRU. ND WH and NU BOP. POOH w/ tubing.
7. Depending on conditions at wellsite, continue with either CUT/PATCH Procedure or BACK-OFF Procedure.



### **CUT/PATCH PROCEDURE:**

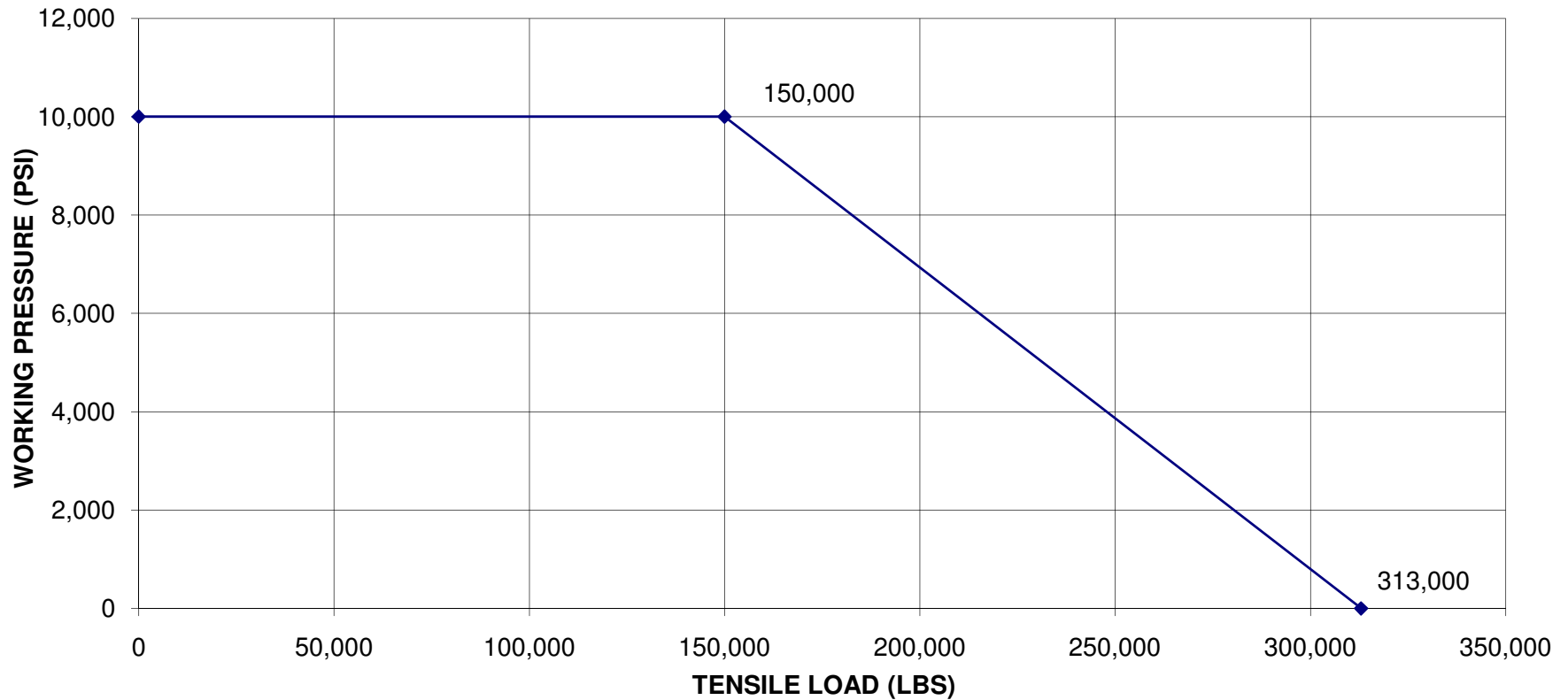
1. PU internal casing cutters and RIH. Cut casing at +/- 30' from surface.
2. POOH, LD cutters and casing.
3. PU 7 3/8" overshoot with 4 1/2" right hand standard wicker grapple, 1 - 4 3/4" drill collar with 3 1/2" IF threads, pup joint, manual bumper sub, and crossovers. If casing cut is deeper than ±30' utilize >7000 ft-lb torque pipe as needed. Pull a minimum of 10,000# to keep grapple engaged if cement top is high (<~900'). If cement top is low (>~900'), more weight will be required to put casing in neutral. Torque casing string to ±7000 ft-lbs, count number of turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ±7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out, release overshoot, POOH, and lay down.
4. TIH w/ skirted mill and dress off the fish top for approximately 1/2 hour. TOOH.
5. PU & RIH w/ 4 1/2" 10k external casing patch on 4 1/2" P-110 casing. Ensure that sliding sleeve assembly shifts ±3' and casing tags no-go portion of patch. NOTE: Shear pins will shear at 3500 to 4500 lbs.
6. Latch fish, PU to 100,000# tension. RU B&C. Cycle pressure test to 3500 psi.
7. Install slips. Land casing w/ 80,000# tension.
8. Cut-off and dress 4 1/2" casing stub.
9. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~7908'. Clean out to PBTD (10,130').
10. POOH, land tbg and pump off POBS.
11. NUWH, RDMO. Turn well over to production ops.

### **BACK-OFF PROCEDURE:**

1. PU internal casing cutters and RIH. Cut casing at +/- 6' from surface.
2. POOH, LD cutters and casing.
3. PU 4 1/2" overshoot. RIH, latch fish. Pick string weight to neutral.
4. MIRU casing crew and wireline services. RIH and shoot string shot at casing collar @ ± 46'.
5. Back-off casing, POOH.

6. PU new casing joint with buttress threads and entry guide and RIH. Tag casing top. Thread into casing and torque up to  $\pm 7000$  ft-lbs, count number of additional turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place  $\pm 7000$  ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out go to step 7.
7. PU 100,000# tension string weight. RU B&C. Cycle pressure test to 3500 psi.
8. Install slips. Land casing w/ 80,000# tension.
9. Cut-off and dress 4 1/2" casing stub.
10. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~7908'. Clean out to PBTD (10,130').
11. POOH, land tbg and pump off POBS.
12. NUWH, RDMO. Turn well over to production ops.

**STRENGTH DATA FOR LOGAN 5.88" OD "L" TYPE CSG PATCH  
4-1/2 CASING, 10K PSI MAX WP 125K YIELD MAT'L  
LOGAN ASSEMBLY NO. 510L-005 -000**



COLLAPSE PRESSURE:  
11,222 PSI @ 0 TENSILE  
8,634 PSI @ 220K TENSILE

Tensile Strength @ Yield:  
Tensile Strength w/ 0 Int. Press.= 472,791lbs.  
Tensile Strength w/ 10K Int. Press.= 313,748lbs.

DATA BY SLS 11/16/2009

**RECEIVED** Jun. 28, 2011



---

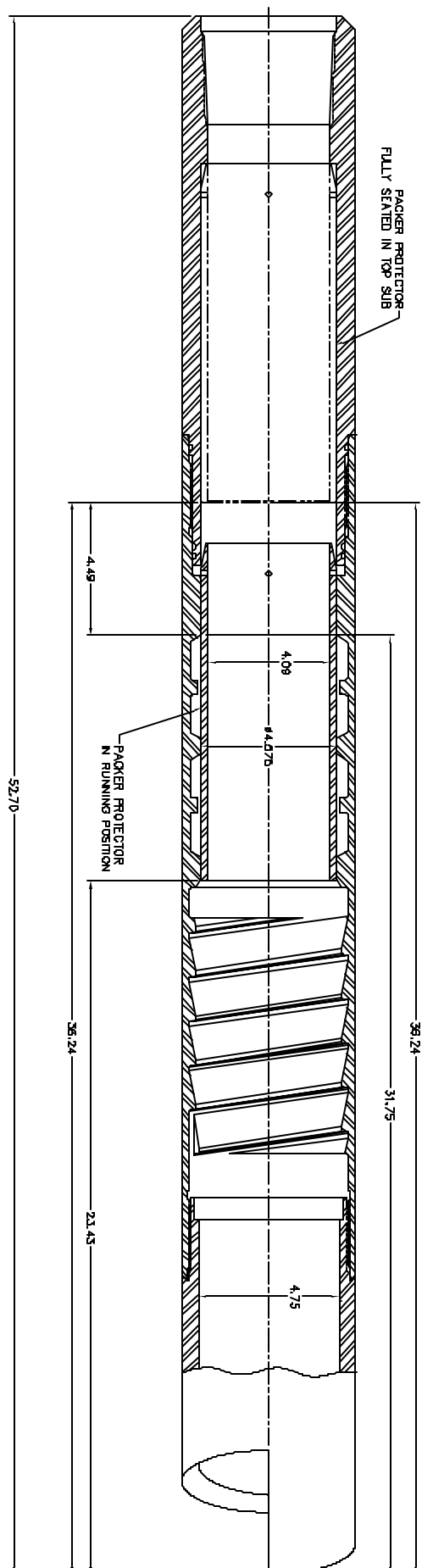
## **Logan High Pressure Casing Patches Assembly Procedure**

All parts should be thoroughly greased before being assembled.

1. Install all four Logan Type "L" Packers in the spaces provided in the Casing Patch Bowl. Refer to diagram provided for proper installation.
2. Install Packer Protector from the Basket Grapple end of the Bowl. The beveled end of the Packer Protector goes in first. Carefully push the Packer Protector through the four Type "L" Packers.
3. Align Shear Pin Holes in Packer Protector so that the holes have just passed into the counter bore at the Top Sub end, refer to diagram. The Packer Protector is provided with four Shear Pin Holes. Use only two holes, 180 degrees apart and install the pins.
4. Screw the Basket Grapple in from the lower end of the Bowl, using left-hand rotation. The Tang Slot in the Basket Grapple must land in line with the slot in the Bowl.
5. Insert the Basket Grapple Control into the end of the Bowl. Align Tang on the Basket Grapple Control with the Tang Slot of the Bowl and Basket Grapple. This secures the Bowl and the Basket Grapple together.
6. Install the Cutlipped Guide into the lower end of the Bowl.
7. Install O-Rings on the two five-foot long Extensions. Screw the first Extension into the top end of the Bowl. Screw the second Extension into the top end of the first Extension.
8. Install O-Ring on Top Sub. Screw Top Sub into top end of second Extension.

Follow recommended Make-Up Torque as provided in chart.

510L-005-001 4-1/2" LOGAN HP CASING PATCH



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-0359
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> UTE
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> NBU 922-18C4CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1903 FNL 0404 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SWNW Section: 18 Township: 09.0S Range: 22.0E Meridian: S		<b>9. API NUMBER:</b> 43047398450000
<b>PHONE NUMBER:</b> 720 929-6514		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 10/26/2011	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input checked="" type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  The operator has concluded the wellhead/casing repairs on the subject well location. Please see the attached chronological history for details of the operations.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> July 18, 2012		
<b>NAME (PLEASE PRINT)</b> Jaime Scharnowski	<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regularatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/17/2012	



**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 922-18C4CS ( BLUE )				Spud Conductor: 5/29/2009				Spud Date: 6/17/2009			
Project: UTAH-UINTAH				Site: NBU 922-18E PAD				Rig Name No: SWABBCO 6/6			
Event: WELL WORK EXPENSE				Start Date: 10/24/2011				End Date: 10/26/2011			
Active Datum: RKB @4,920.00usft (above Mean Sea Level)				UWI: 0/9/S/22/E/18/0/SWNW/6/PM/N/1,903.00/W/0/404.00/0/0							
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation			
10/18/2011	11:00 - 13:00	2.00	PROD	35				Tb 307 Cs 672 FL GC Got Viper Plunger out of Wellhead. Ran w/Up Shear Fish Tool to SN at 9509, latched, pulled Steel Spring w/single X-cups, cups good. Plunger and Spring in Sep Bldg, left for Rig Job. Returned well to production. Rigged down.			
10/24/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= WELL CONTROL			
	7:15 - 17:00	9.75	WO/REP	30		P		FWP= 300# TUB, 900# CAS, RU RIG CONT TUB W/ 30 BBLS TMAC (STEM ON MASTER VALVE WAS BROKEN) ND W/H NU BOPS RU FLOOR & TUBING EQUIP CONT CAS W/ 50 BBLS TMAC POOH W/298 JNTS LD BHA RU W/L RIH W/ GUAGE RNG TO 8000' PU 10K CIBP RIH SET @ 7950' DUMP BAIL 2 SKS CEM ON PLG FILL HOLE W/ TMAC PRESS TEST TO 500# PREP TO REPAIR W/H IN AM SIW SDFN			
10/25/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= P.U FISHING EQUIPMENT			
	7:15 - 17:00	9.75	WO/REP	30		P		SIWP= 0 PSI, ND BOPS PU INT CUTTER CUT CSG BELOW HNGR ND WELLHEAD PU OVERSHOT RIH OVER CSG RU W/L & CSG TONGS APPLY LH TORQUE SET OFF STRING SHOT BACK OFF PUP PU NEW PUP RIH THREAD ONTO CSG STRING @ 6500# TORQUE RU & TEST TO 3500# SET SLIPS @ 90000# NU WELLHEAD & BOPS RU FLOOR & TUBING EQUIP PU 3-7/8" BIT RIH TAG TOC @ 7930' RU PWR SWVL PREP TO C/O IN AM SIW SDFN			
10/26/2011	7:00 - 7:15	0.25	WO/REP	48		P		JSA= N2 FOAMING			
	7:15 - 17:00	9.75	WO/REP	30		P		SIWP= 0PSI EST CIRC W/ N2 FOAMER DRILL THRU CEM & CIBP @ 7950' CIRC CLEAN CONTINUE TO RIH TAG @ 10110' EST CIR COULDNT MAKE HOLE CIRC CLEAN RD SWVL POOH LD 19 JNTS LAND TUB ON HNGR W/ 298 JNTS EOT @ 9517.20' DROP BALL PMP OFF BIT RIH W/ BROACH TO XN NPL RD FLOOR & TUBING EQUIP ND BOPS NU WELLHEAD SIW RD RIG MOVE TO 18C4BS RU RIG SDFN			